



REQUEST FOR APPROVAL

ITEM	DC Voltage Stabilized Supply
SPEC.	A5V, B5V, B13V, Vamp, LED Output(4CH)
Maker P/N	PD46B2Q CDY
CODE NO.	BN44-00522B
APPLIED TO	40", 46" PD B'd
REFERENCE	R.B

[Green Procurement](#)

Vendor Code : DC07
Registration Date : 2011.09.24

DRAWING	CHECK	AGREEMENT	APPROVAL
박인섭	박노성	박승규	남윤익
2012.01.13.	2012.01.13.	2012.01.13.	2012.01.13.
A TERM OF VALIDITY	OVER AT LEAST 15-YEARS ISSUED DATE		

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SPECIFICATION
PD46B2Q_CDY
(REVISION HISTORY)

STD RECORD NO. BN44-00522B
PAGE PUB.DATE 2011.12.13
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1. REVISION HISTORY

SPECIFICATION
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PAGE PUB.DATE 2011.12.13
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담당자 : 박 인 섭

REVISION HISTORY

PR 승인원

Revision

변경 사유

변경내용

R.A

1.0

(11.12.03)

1

최초승인

정식 승인원

Revision

No.

변경일자

변경 사유

변경내용

R.B	1.1 (11.12.23)	11.12.26	1	PFC단 FET GATE 저항 STRESS 개선	R-CHIP SIZE 변경으로 STRESS 추가마진 확보	RP808, RP809	1/8W 100Ω F 2012	1/4W 100Ω F 3216
			2	설계 최적화	부품변경	ZDS803	MM3Z15VT1G	BZX84B15LT1G
			3	55" 3D MODE시에 THERMISTOR BOTTOM 면 온도 NG(92.8')	THERMISTOR PATTERN 면적 확대하여, 온도 마진확보	THERMISTOR PATTERN		
			4	LED ODP IC VCC LINE과 PWM SIGNAL LINE 추가이격	SMD SIZE변경으로 이격 거리 개선	R9839	1/10W 1KΩ F 1608	1/4W 1KΩ F 3216
			5	EMI(방사) MARGIN 부족발생	Y-CAP 용량변경, 비드추가 해서 MARGIN 확보	CY806S	400V 2.2nF	BEAD BFS2550A0L (AXIAL BEAD)
			6	부품변경으로 인한 Location No. 변경	Location No. Silk 변경	SILK L/C	CY806S	BBP801
			7	Straight Type 자재수급 문제로 Forming형태 변경	Forming형태 변경	CS808	LZ 50V 47uF Straight Type	LZ 50V 47uF Left Forming Type
R.B	1.1 (11.12.23)	12.01.13	BARCODE LABEL UNIT CODE 오적용	UNIT CODE 수정	BARCODE LABEL	SEC S/N : CN08BN4400522BDC07BB40001	SEC S/N : CN07BN4400522BDC07BB40001 R.B	

SEC S/N :
CN08BN4400522BDC07BB40001SEC S/N :
CN07BN4400522BDC07BB40001 R.B



SPECIFICATION
PD46B2Q_CDY
(ELECTRICAL SPECIFICATION)

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2. ELECTRICAL SPECIFICATION

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1. Supply Overview

- 1) This specification describe the requirements of DC VSS which designed to be used in Samsung Electronics [PD46B2Q](#).
- 2) The maximum total power drawn from the outputs is [214 watt](#) max for respectively. This can be drawn in any combination from all outputs, within the levels specified in output requirements section
- 3) # of output of the DC VSS is [voltage 4ea](#) and [current 4ea](#).
- 4) Remote ON/OFF control :
DC VSS Vdrv, B5V, B13V, Vamp(except ST_BY A5V) outputs shall be enabled with an active high TTL compatible signal (PS_ON). ST_BY A5V is ON whenever AC power is present.
- 5) All output specifications shall be met under worst-case conditions of input voltage, Min / Max load currents and temperature range and long-terms operation.
- 6) The DC VSS shall be global shut downed responding to any protection status. Required protection are OTP,OVP,OCP,(UVP).
- 7) Output Current Definition :
Peak Current : Repeatable Peak Current (excluding turn-on inrush current)
Max. Current : Max. output current capability of each outputs.
Typical Current : Typical max. load configuration
- 8) Detail Reliability Test : Refer to the reliability specification of Visual Display Division

2. Input Requirements

AC Input	Min.	Nominal (rated)	Max.
Frequency	47Hz	50 / 60Hz	63Hz
Voltage	90V(80V, No_Failure)	100~240V	264V (286V, No Failure)
Phase / PFC	Single-Phase / Single-Phase / Including Power Factor Correction(*1)		
Inrush Current	60 amps or less (cold & hot start)(*2)(*3)		
ON/OFF frequency of AC power	0.1 sec. or more		
Leakage Current	Less 0.5 mA @ 240Vac,60Hz		
Lightning Surge Test	6kV(Common/Normal Mode) : No components damaged 13kV(Common/Normal Mode) : Under 3 components damaged		
Hi-Pot Test	O-QC	1. AC 110V : Test Voltage AC 2.0KV, Cut-off Current 5mA, Test Time 60 sec 2. AC 220V : Test Voltage AC 3.0KV, Cut-off Current 5mA, Test Time 60 sec	
	Productline	1. AC 110V : Test Voltage AC 1.5KV, Cut-off Current 5mA, Test Time 1.5 sec 2. AC 220V : Test Voltage AC 2.5KV, Cut-off Current 5mA, Test Time 1.5 sec	
DIELECTRIC STRENGTH	This is no flash 60sec during the test when 3KVac voltage is applied to between primary and Secondary.		
Stand-by power consumption	ST_BYA5V – 2mA		
	Pin : 0.027watt ↓		

3. Output Requirements

3.1. Output Voltage

(1) DC VSS OUTPUT

Output Name	Output Voltage			Load Current				Characteristic	Usage	Remark
	Nominal	Tolerance	Range	Min	Typ. (STRESS)	Max	Peak			
A5V	5.3V	±5%	5.04V	0mA	580mA	700mA	840mA	Pulsating	AC-ON	Drawn always
			~ 5.57V							
B5V	5.3V	±5%	5.04V	0A	5A	5.5A	6.1A	Pulsating	Picture-ON	-
			~ 5.57V							
B13V	12.8V	-	11.88V	0A	4.2A	4.6A	5.1A	Pulsating	Picture-ON	-
			~ 13.13V							
Vamp	12.8V	-	11.88V	0A	0.3A	2.3A	3.3A	Pulsating	Picture-ON	-
			~ 13.13V							
Vdrv	Vdrv should be lower than (minimum LED output voltage) ~ 67V								Pulsating	Picture-ON PD B'd internal use

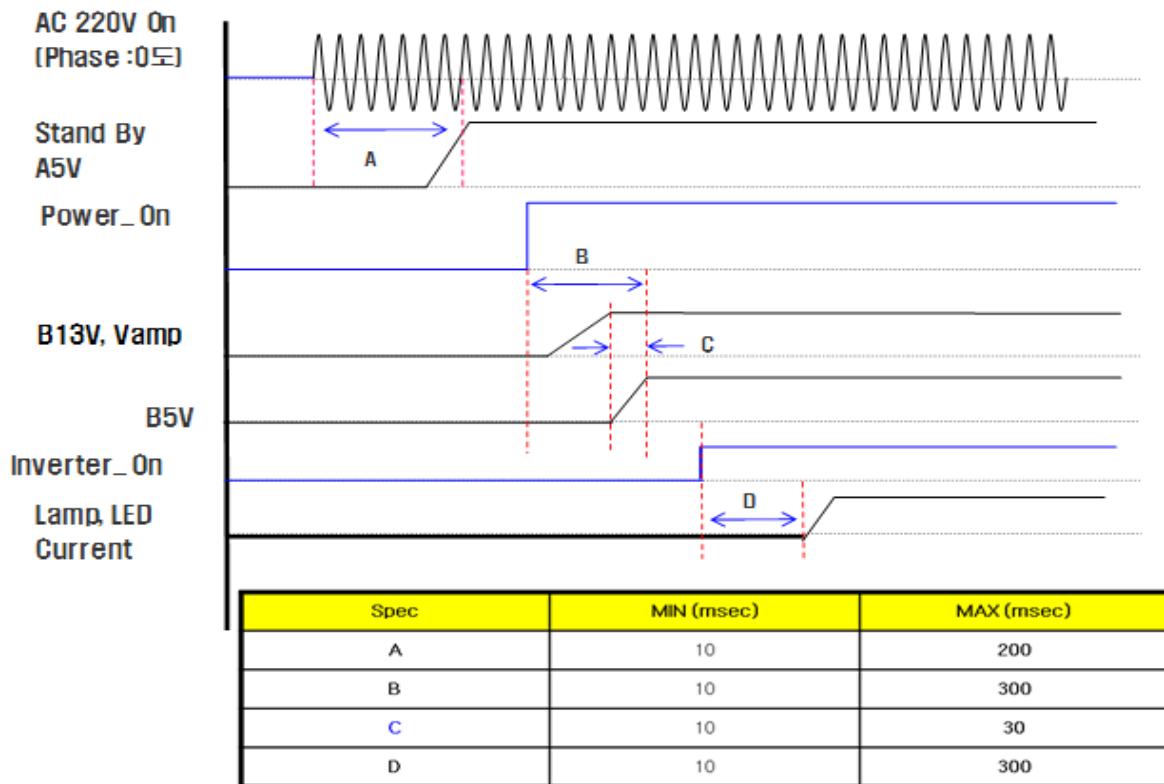
(2) LED OUTPUT

Item	Specification				Remark
	Min	Typ. (stress)	Max	Peak	
Number of outputs	-	4	-	-	
Normal output current (OD0)	186mA (-2%)	190mA	194mA (+2%)	-	Measure DC component only at 100% duty condition. Set condition duty MAX 90%(145mA)
OD1 output current (OD1)	360mA (X1.88 of Normal output current values)				Valid with OD_ON/OFF signal pulled down to zero
OD2 output current (OD2)	700mA (X3.75 of Normal output current values)				Measure DC component only at 100% duty condition
Output voltage	71V (-15%)	84V (40%) 96V (46%)	135V (+40%)	-	Measure DC component only at 100% duty condition
Normal Output Current ripple	0	-	38mApp (000) 72mApp (001) 140mApp (002)	-	±10% of ODx current at ODx condition
Rise/Fall time	0	-	1us	-	External PWM signal required
Minimum stable pulse width	0	-	6us	-	External PWM signal required Rise/fall times included
Normal PWM dimming duty	0	-	100%	-	External PWM signal required
OD1 PWM dimming duty	-	60%	-	-	Valid with OD_ON/OFF signal pulled down to zero
OD2 PWM dimming duty	-	25%	-	-	
Over-drive PWM overlapping	0	-	100%	-	
Normal PWM dimming frequency	0	-	300Hz	-	External PWM signal required
Over-drive PWM dimming frequency	-	120Hz	-	-	Valid with OD_ON/OFF signal pulled down to zero

3.2. Protection & Sequence Requirements

Output	Ripple & Noise	Protection (Global Shutdown)						
		OCP	OVP	UVP	OTP	No Load Operation	Output Short	Reset after shutdown
ST-BY A5V	200mV (4%)	SCP HSCP	OVER 7.0V	-	The DC VSS shall provide the over temperature protection. No component failure is allowed in any of output overload condition.	Possible to operate at no load condition with no damage. Possible to set the output voltage at no load condition.	No Hardware Failure (Protection mode is Global Shutdown)	If the DC VSS latches into shutdown state due to the fault of each outputs, the DC VSS shall recover to nominal operation only after the fault has been removed and PS_ON or AC input has been cycled ON/OFF with a minimum OFF time of 1 second.
B5V	200mV (4%)	SCP HSCP	OVER 7.0V	-			The DC VSS shall recovery only after the fault condition has been removed and PS_ON or AC input has been cycled ON/OFF with a minimum OFF time of 1 second.	
B13V	500mV (4%)	SCP HSCP	OVER 15V	-			The DC VSS shall recovery only after the fault condition has been removed and PS_ON or AC input has been cycled ON/OFF with a minimum OFF time of 1 second.	
Vamp	500mV (4%)	SCP HSCP	OVER 15V	-			The DC VSS shall recovery only after the fault condition has been removed and PS_ON or AC input has been cycled ON/OFF with a minimum OFF time of 1 second.	
Vdrv	1.2Vpp	SCP	OVER 95V	-			The DC VSS shall recovery only after the fault condition has been removed and PS_ON or AC input has been cycled ON/OFF with a minimum OFF time of 1 second.	

3.3. Output ON/OFF Sequence

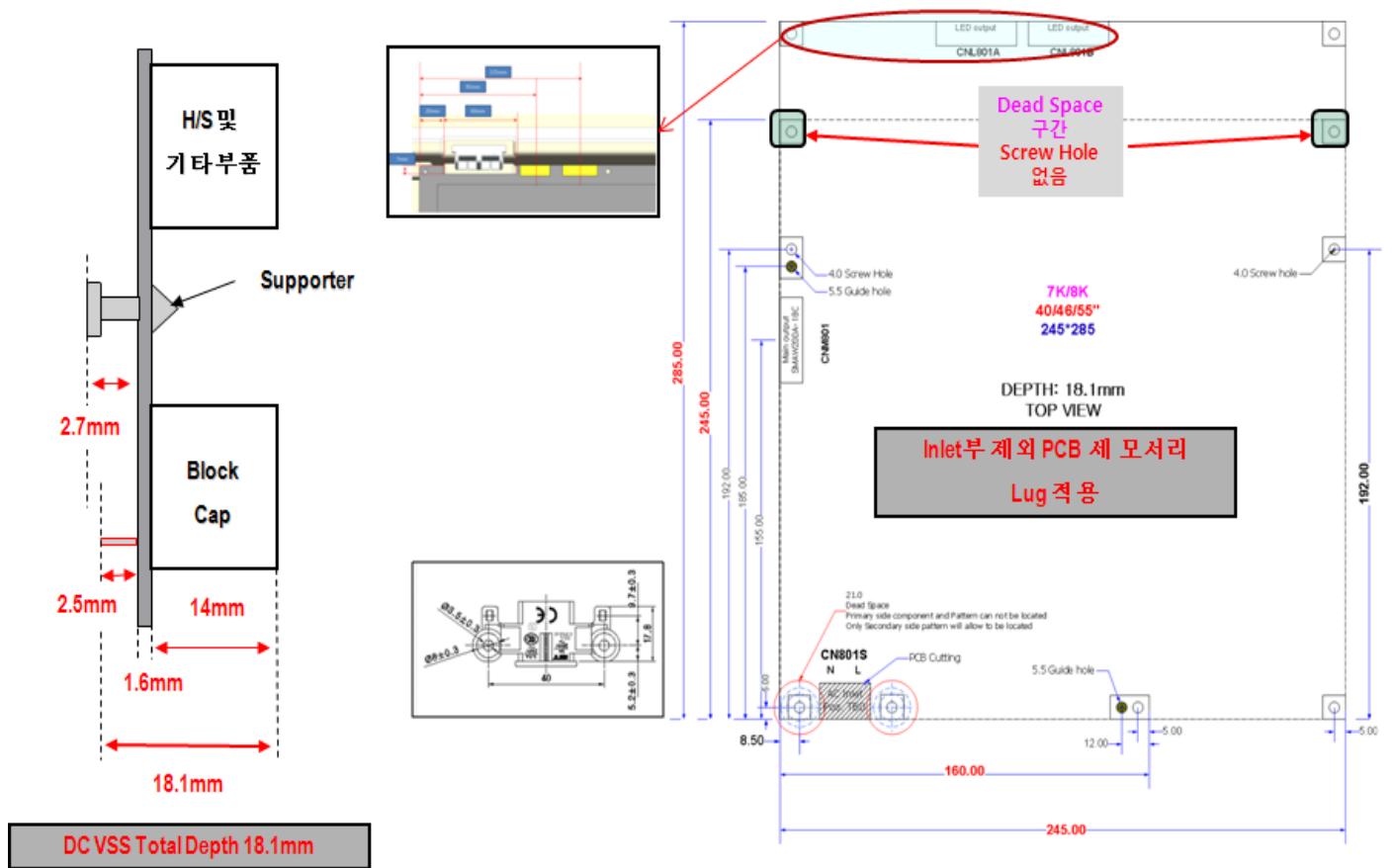


3.4. Small Signal Requirements

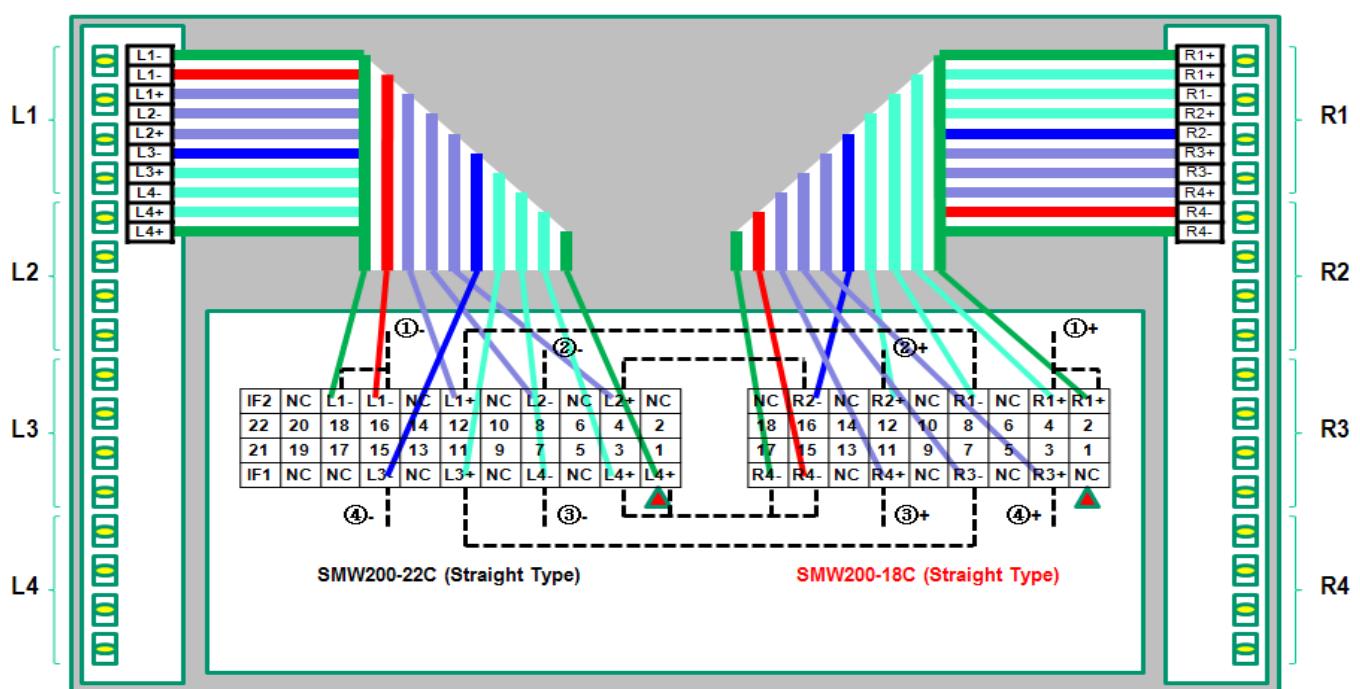
Name	Function Description	Signal Definition			
		TTL	TTL status	DC output	TTL range
PS_ON	PS_ON is the signal for remote ON/OFF control. Outputs (except ST_BY A5V) shall be enabled with an active high, TTL compatible signal (PS_ON). The ST_BY A5V is on whenever AC power is present.	Active High	LOW	OFF	0.0V ~ 1.0V
			HIGH	ON	2.0V ~ 5.0V

4. Mechanical Requirements

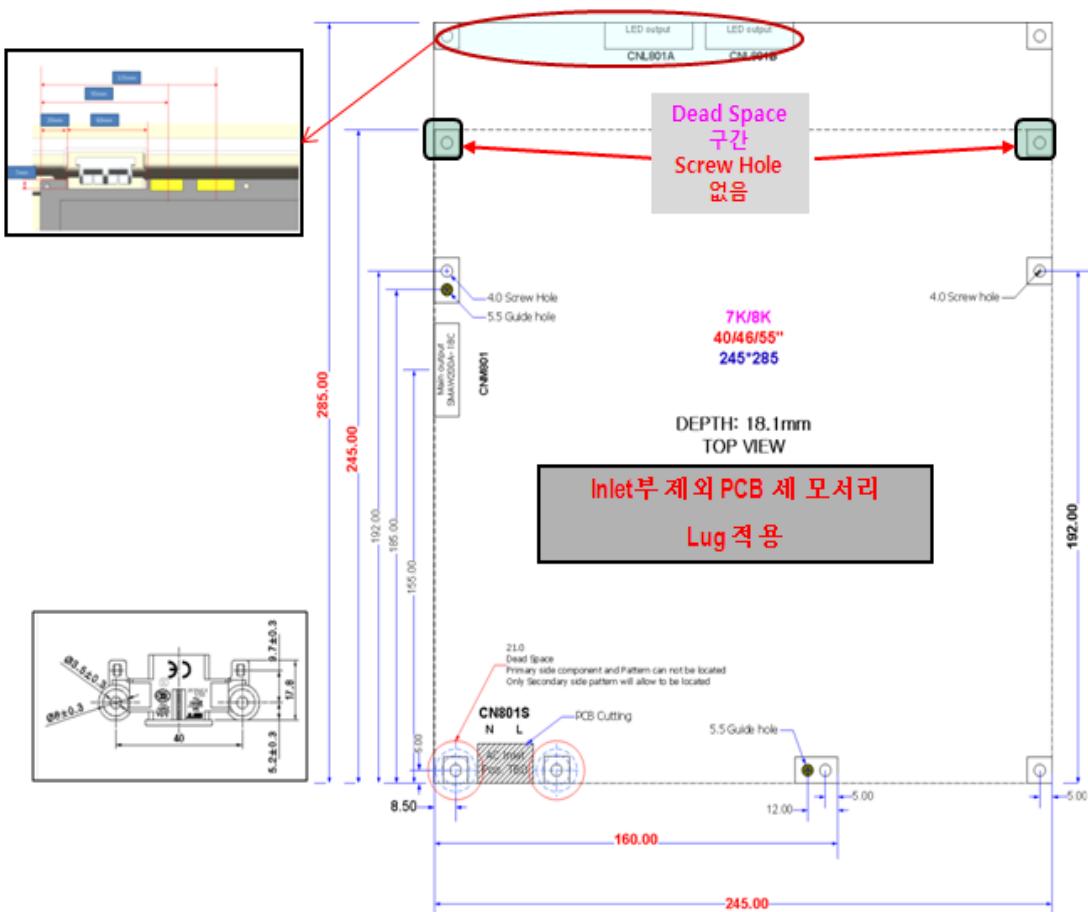
4.1. PCB Dimension



4.2. Connector Location And Wire Harness Connection



4.3. PCB Outline Figure



4.4. Output Connector

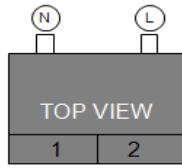
② Output Connector

A. AC INPUT CONNECTORS

A-1. AC_INPUT connector [TBD] [CN801S]

CONNECTOR-HEADER, 2P,
INSULATOR : NYLON66(UL 94V-0) G10%
VENDOR : Dong-il [DAC-18D3M]

PIN #	Signal
1	AC_N
2	AC_L



B. OUTPUT CONNECTORS

B-1. LED connector [TBD] [CNL802A, CNL802B]

- Part Number : CONNECTOR-HEADER, 18, 22P, 2R, 2.0mm, ANGLE, BOX TYPE , INSULATOR : TBD
 - CONTACT : BRASS(TIN-PLATED)
 - VENDOR : YEONHO ELECTRONICS, SMW200-22C, 18C
- Top Locking & Straight Type**

Refer to LED Connection Diagram on next page.

B-2. LED connector [TBD] [CNL804]

CONNECTOR-HEADER, 2
VENDOR : YEONHO SMW200-02P

NO	Signal
1	●
2	●

BLU-On Only

NO	Signal
1	○
2	○

Control by Main B'd

C. Main DC OUTPUT CONNECTORS

C-1. Image Connector [TBD] [CNM803]

CONNECTOR-HEADER(STRAIGHT) 20P, 2R, 2.0mm,
BOX TYPE INSULATOR : NYLON66(UL 94V-0) G10%
CONTACT: BRASS(TIN-PLATED)
VENDOR: YEONHO ELECTRONICS,
[SMW200-H20S2 Angle type]

Side Locking Type

Description	Pin no		Description	M O D E L B
PWM_DIM 4	2	1	OD_Level	
PWM_DIM 3	4	3	OD_On/Off	
PWM_DIM 2	6	5	GND	
PWM_DIM 1	8	7	B13V	
B13V	10	9	B13V	
BLU_On/Off	12	11	Vamp	
GND	14	13	Vamp	
GND	16	15	GND	
A5V	18	17	B5V	
Power On/Off	20	19	B5V	

5. Environmental & Safety Requirements

5.1. Environmental

- ✓ DC VSS Supplier must consider that ambient temperature of DC VSS is higher than that of the table below because ambient temperature in the table is the temperature spec. of SET itself.

ITEMS	Condition	Min.	Max.	Remarks
Ambient Temperature	Operating	-20 C°	70 C°	-
	Storage	-40 C°	80 C°	-
Humidity	Operation	10%	90%	60 C°
	Non-operation	5%	95%	75 C°
Altitude	Operation	0 C°	50 C°	0-15000ft
	Shipping	-40 C°	N/A	0-50000ft

EMC ITEMS	Standard	Limits
Conducted and Radiated Emission	FCC part15. ANSIC63.4 EN55022, CISPR22	Class B limits with 10dB min. margin
Harmonics	EN61000-3-2	Class D limits

Mechanical Shock & Vibration Test for DC VSS		
Shock	98 m/S ² (Shock test consist of pivoting the DC VSS, from one edge of its bottom side, on a flat surface such as wood having thickness of 10mm or more, and allowing the opposite edge to fall from a height of 50mm to this surface. The test is performed three times on each edge of the bottom side of the DC VSS.)	
Vibration	Operational	Non-Operational
	Frequency (Hz)	5 ~ 100
	Acceleration (m/S²)	4.9
	Sweep Cycle (min)	3
	Time (min)	30, 10 cycles
	Direction	X,Y,Z

5.2. Safety

	UL(cUL)	IEC	EN	EK	Japan
TV	UL 60065, 7th	IEC 60065,7th	IEC deviation	K60065	IEC deviation
MONITOR	UL 60950-1, 1st	IEC 60950-1, 1st	IEC deviation		IEC deviation
(MEDICAL)	UL60601-1	IEC60601-1	IEC deviation		X
	CCC				
	Product Liability related. : component short-open test				
	Insulation Class : Class B				

6. Reliability Requirements

6.1. Components Derating (Stress)

- ✓ The DC VSS shall comply with the Samsung electronics stress guideline.
- ✓ The surface temperature of all components in DC VSS shall **not exceed 85 C°** being equipped in set with 25 C° external ambient temperature. Any exception are subject to the final approval. The internal ambient temperature of SET shall be **55 C° ~ 60 C°**.
- ✓ Ex) Samsung electronics stress guideline

Stress rating (%)		Resistor	Capacitor			DIODE	BJT	FET	Magnetic
			General	Electro	X,Y-Cap.				
Voltage	normal	80%	90%	90%		80%	80%	90%	No saturation under any condition (*1)
	transient							90%	
Current	normal	-	100%	100%		70%	70%	50%	
	transient							-	
Power	normal	50%	-	-		-	-	-	
	transient							-	
Temp.		85 C°(*2)							

6.2. MTBF

- ✓ All component of DC VSS shall have a minimum RELEX SOFTWARE Program (Bellcore Issue 6 (TR-332)) calculated MTBF of 20K hours of operation at 90% confidence level at 25 C°, worst input and max load.

6.3. Reliability Test Only For DC VSS B'd

✓ ALT/Halt/Hass Test shall be performed to all of DC VSS B'D before installing to SET by Samsung Electronics.

ITEMS	ALT Test	Halt Test	Hass Test
Full Name	Accelerated Life Test	Highly Accelerated Life Test	Highly Accelerated Stress Screening
Test Time	Long-Term (approx.1000Hr)	Mid-Term (5days)	Short-Term (1Hr)
# of Sample	30ea ↑	5ea ↑	Total Inspection
Development Stage	PV ~ PR	DV,PV,PR	PR, SR
Test Items	-	① Low Temperature Step Stress ② High Temperature Step Stress ③ Rapid Thermal Shock Cycle ④ Vibration Step Stress ⑤ Combined thermal Shock & Vibration	-10 °C ~ 70°C (Average Transition Rate : 40 °C /min) + 0 ~10Grms

✓ As for the detail test method, Refer to the Reliability Test Standard of VD Division.

	TEST NAME	TEST CONDITION						
		Applied Test voltage	Temp.	Humidity / Others	AC input	Test Time / Test Step	LCD setting	Additional Test
1	Low Temperature Operation	N/A	-15°C	0 %	90~260V	5Hr.	Standard Display Mode, Volume Max.	ON/OFF
2	Temperature Drift	N/A	-30~70°C	N/A	90~260V	47Hr./13step	Standard Display Mode / Lion Pattern	-
3	High Altitude Step	N/A	0~45°C	0~1500FT	90~260V	4Hr.20min.	Standard Display Mode	-
4	Acoustics Noise	N/A	25°C	N/A	90~260V	N/A	Standard Display Mode	-
5	Temperature Accelerate	N/A	50°C / 60°C	N/A	90V / 264V	100Hr./4step	Dynamic Display Mode	ON/OFF
6	High Temperature Life Time	N/A	40°C±5 °C	0~80%	90V / 264V	100Hr./4step	Standard Display Mode	ON/OFF
7	Hi-Pot & Insulation Resistance	Up to 3.6kV	N/A	N/A	N/A	1sec. or 1min.	-	-
8	Frequent AC ON/OFF	N/A	N/A	N/A	90~260V	30step	Standard Display Mode	ON/OFF
9	AC input limitation	N/A	40°C±5 °C	N/A	AC±30%	6Hr.30min	Color Bar Mode	ON/OFF
10	Lighting Surge	Up to 13kV	N/A	N/A	220V	5 time per every step	Standard Display Mode	-
11	AC input interruption (//Dip)	N/A	N/A	N/A	100V/50Hz	5sec interval	Standard Display Mode	-
13	Impulse	Up to 2kV	N/A	N/A	100~240V	-	Color Bar Mode	-
13	ESD	Up to 20kV	N/A	N/A	100~240V	10	Standard Display Mode	-
14	Surge	Up to 1kV	N/A	N/A	100~240V	30	Standard Display Mode	-
15	Stress Analysis / MTBF	-	-	-	-	-	-	-



동양 E&P
energy & power solution

SPECIFICATION
PD46B2Q_CDY
(COMPONENT LIST)

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3. COMPONENTS LIST

(4 Points Conformity final result)

제품명		PD46B2Q_CDY											4회정찰 “-” 표시되지 않는 자료		
REV	R.B														
모델명		PO46B2Q_CDY													
작성자		황승관													
CODE	BN44-00522B	NO.	LOCATION	DESCRIPTION	SPECIFICATION	Q'TY	VENDOR	PART NO.	CODE	공정	공용부품승인여부	일자성	Ass'y	Circuit Diagram	BOM
1	FOR SET	PCB		FR-1,245-285, 1.67 sectional (1000SRK, KING BOND) UL79-3 or .SETER, MIN. 130°C, CTI 600		1	GAOXIN ELECTRONICS	POJ PD46B2Q_CDY	MFAA0037330	Axial	-	OK	POJ PD46B2Q_CDY	-	POJ PD46B2Q_CDY
							HT CIRCUITS KOREA DAEDUCK ELECTRONIC	POJ PD46B2Q_CDY			-	OK	POJ PD46B2Q_CDY	-	POJ PD46B2Q_CDY
2	HS801S	HEAT SINK	AL6063 53*30*6.9			1	YODONN NRT	H/S PD46B2Q_CDY HS1	M8AA0035220	HS	-	OK	HS801S	H/S # PD46B2Q_CDY HS801S	H/S # PD46B2Q_CDY HS801S
							YOOBANGHABONG electricity				-	OK	-		
	BS801S	DIODE-BRIDGE	600V 15A			1	SHINDENGEN	D15XB60	MPBA0003210	HS	-	OK	D15XB60	D15XB60(600V/15A)	600V 15A
							GULF	GS1B15A60	MPBA0004790		-	OK	GS1B15A60		
	FOR BS801S	COMPOUND	WHITE			0.1g	SHINETSU	G-746	MFAA000210	HS	-	OK	-	WHITE	WHITE
							OKONG	OKC-5500	-		-	OK	-		
3	FOR BS801S	SCREW-TAPITITE				1	SUNGJINMETAL	SII CH M/S 3+9.2 Cr3+/SILVER	MCAA0001610	HS	-	OK	-	-	-
									-	OK	-				
	HS802S	HEAT SINK	AL6063 192*30			1	YODONN NRT	H/S PD46B2Q_CDY HS2	M8AA0035230	HS	-	OK	HS802S	H/S # PD46B2Q_CDY HS802S	H/S # PD46B2Q_CDY HS802S
							YOOBANGHABONG electricity				-	OK	-		
	DS812, DM810, DM813	D100E-SCHOTTKY	100V 20A TO-220F 100V 20A TO-220F			3	SANKEN	FME1-220A	MPBA0014600	HS	-	OK	EN-220A	FME1-220A(100V 20A)	100V 20A TO-220F
							Nihon-Inter	FOH208U10	MPBA0015490		-	OK	FOH208U10		
	DM811	U.F-D100E	300V 10A TO-220F 300V 10A TO-220F			1	TSC	SFF1005GA	MPBA1012040	HS	-	OK	SFF1005GA	SFF1005GA(300V 10A)	300V 10A TO-220F
							SENSITRON	SOURF1030CTR	MPBA1012050		-	OK	SOURF1030CTR		
	DM814	U.F-D100E	300V 10A TO-220F 300V 10A TO-220F			1	TSC	SFF1005G	MPBA1012050	HS	-	OK	SFF1005G	SFF1005G(300V 10A)	300V 10A TO-220F
							SENSITRON	SOURF1030CT	MPBA1012070		-	OK	SOURF1030CT		
4	FOR DS812, DM810, DM811, DM813, DM814	COMPOUND	WHITE			0.25g	SHINETSU	G-746	MFAA000210	HS	-	OK	-	WHITE	WHITE
							OKONG	OKC-5500	-		-	OK	-		
	FOR DS812, DM810, DM811, DM813, DM814	SCREW-TAPITITE	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)			5	SUNGJINMETAL	SII CH M/S 3+9.2 SILVER	MCAA0008920	HS	-	OK	-	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)
											-	OK	-		
	HS803S	HEAT SINK	AL6063 126.6*25			1	YODONN NRT	H/S PD46B2Q_CDY HS3	M8AA0035260	HS	-	OK	HS803S	H/S # PD46B2Q_CDY HS803S	H/S # PD46B2Q_CDY HS803S
							YOOBANGHABONG electricity				-	OK	-		
5	DM8015, DM8025	FET	500V 8A TO-220 500V 9A TO-220			2	TOSHIBA	TK8A500	MPCAE001130	HS	-	OK	TK8A500	TK8A500(500V 8A)	500V 8A TO-220
							MAGNACHIP	FET MDFN950	MPCE0012650		-	OK	FET MDFN950		
	QP8055, QP8065	FET	600V 11A TO-220F 600V 12A TO-220F			2	MAGNACHIP	MDF11N60	MPCE0012460	HS	-	OK	MDF11N60	MDF11N60(600V 11A)	600V 11A TO-220F
							TOSHIBA	TK12A600	MPCE0012310		-	OK	TK12A600		
	DP804	D100E-RECTIFIER	600V 9A TO-220F 600V 10A TO-220F			1	NXP	BYV29FX-600	MPB8005930	HS	-	OK	BYV29FX-600	BYV29FX-600(600V 9A)	600V 9A TO-220F
							SANKEN	FMN-1106S	MPB8005940		-	OK	FMN-1106S		
6	FOR QM801S, QM8025, QP8055, QP8065, DP804	COMPOUND	WHITE			0.25g	SHINETSU	G-746	MFAA000210	HS	-	OK	-	WHITE	WHITE
							OKONG	OKC-5500	-		-	OK	-		
7	FOR QM801S, QM8025, QP8055, QP8065, DP804	SCREW-TAPITITE	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)			5	SUNGJINMETAL	SII CH M/S 3+9.2 SILVER	MCAA0008920	HS	-	OK	-	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)	SII CH M/S 3+9.2 SILVER (WASHER REMOVE)
											-	OK	-		
8	IC PFC CONTROL	SOP-8				1	FUJI	SPC7011F	MPJA2007670	SMD	-	OK	SPC7011F	SOP-8	SOP-8
9	IC P801						SANKEN	STR2A153D	MPJA2007750	Person	-	OK	STR2A153D	Wds=650V DIP-8	Wds=650V DIP-8

7	IOM801	IC RESONANT CONTROL	Vth=12V SOT-8	1	T_i	U0225600	MPJA001200	SMD	-	OK	U0225600	UCC25600	Vth=12V SOT-8
8	IC9801, IC9802		Vcc=12V 1GP SMD, 2CH DRIVE IC		MAGNACHIP	SLC5012M	MPHA000040		-	OK	SLC5012M	SLC5012M	-
9	IC9804, IC9805, IC9806, IC9807, IC9808, IC9809, IC9810, IC9811	IC DRIVER	PWM DIMMING INPUT 1C SOT23-6Pin	8	MAGNACHIP	SLC9012M(MAP9101)	MPJA007860	SMD	-	OK	SLC9012M(MAP9101)	SLC9012M	SLC9012M(MAP9101)
10	IC9800		VDC=36V 550mW SOIC-8 VDC=36V 280mW FLT(NB1) 8P		BOC	AS358MTR-G1	MPJA0005120		-	OK	AS358MTR-G1	AS358MTR-G1	VDC=36V 550mW SOIC-8 VDC=36V 280mW FLT(NB1) 8P
11	IC9802, IC9803, IOM802, IC9803	IC-POS1, ADJUST REG.	36V 1% SOT-23F 36V 1% SOT-23F	4	BOC	AS4318NTR-E1	MPJA0005110	SMD	-	OK	AS4318NTR-E1	AS4318NTR-E1	36V 1% SOT-23F 36V 1% SOT-23F
12	Q9805, Q9806, Q9807, Q9808		FET 500V 8A TO-220 500V 9A TO-220		KEC	KIA338F	MPJA003120		-	OK	KIA338F	-	36V 1% SOT-23F
13	Q9809, Q9810, Q9811, Q9812	FET	250V 7.5A D-PACK 250V 6.2A D-PACK	4	FAIRCHILD	F007h25LZTM	MPCAE012900	HS	-	OK	F007h25LZTM	TK8A500(500V 8A)	KF9n25D(250V 7.5A) 250V 7.5A D-PACK
14	Q9804		40V 35A D-PAK N-ch 40Vds 40A		AOS	A004186	MPCAE012730		-	OK	A004186	A004186	40V 35A D-PAK N-ch 40Vds 40A
15	Q9801, Q9801, Q9802, Q9804	FET	60V 300mA SOT23 60V 300mA SOT23	4	PANJUIT	ZH7002K	MPCAE000560	SMD	-	OK	ZH7002K	ZH7002K	60V 115mA SOT23 60V 115mA SOT23
16	Q9802, Q9813, Q9814, Q9815, Q9816, Q9817		50V 100mA SOT-23 50V 100mA SOT-23		KEC	KRC101S	MPCA0005460		-	OK	KRC101S	KRC101S	50V 100mA SOT-23 50V 100mA SOT-23
17	Q9802	TR	NPN 60V 3A NPN 60V 3A	1	KEC	KTD1624	MPCA0009800	SMD	-	OK	KTD1624	KTD1624	NPN 60V 3A NPN 60V 3A
18	Q9801, Q9802, Q9803, Q9801, Q9803		NPN 40V, 600mA SOT-23 40V 600mA 350mW		ONSEMI	LMBT2222AL1G	MPCA0009690		-	OK	LMBT2222AL1G	2222A	NPN 40V, 600mA SOT-23 40V 600mA 350mW
19	Q9803, Q9804, Q9803, Q9800	TR	NPN -60V 600mA SOT-23 60V 600mA	4	Leshan Radio Company	LMBT2907AL1G	MPCA0009700	SMD	-	OK	LMBT2907AL1G	2907A	NPN -60V 600mA SOT-23 60V 600mA
20	Q9809, Q9812, Q9813, Q9818		400V 2A 00-15 400V 2A 00-15		TSC	SF26G	MFBA1011930		-	OK	SF26G	SF26G(400V 2A)	400V 2A 00-15 400V 2A 00-15
21	Q9806, Q9814, Q9815	F.R-D100E	1000V 1A 1000V 1A	3	PCTRONIX	1N4007S	MPBA0000510	Axial	-	OK	1N4007S	1N4007	1000V 1A 1000V 1A
22	Q9804, Q9808		1000V 1.5A 1000V 1.5A		GULF	SSF20G	MFBA1003840		-	OK	SSF20G	-	1000V 1.5A 1000V 1.5A
23	Q9807	U.F-D100E	1000V 1A 1000V 1A		GULF	UF4007	MFBA1011710	Axial	-	OK	UF4007	UF4007	1000V 1A 1000V 1A
24	Q9801, Q9805		1000V 3A 20mm Forming 600V 3A 20mm Forming		TSC	1N5408-09	MFBA0000550		-	OK	1N5408-09	1N5408-09(1N5406)	1000V 3A 20mm Forming 600V 3A 20mm Forming
25	Q9815, Q9816	D100E	40V 2A 40V 2A		PANJUIT	SR24E	MPBAE015090	SMD	-	OK	SR24E	SR24E	40V 2A 40V 2A
26	Q9809, Q9804, Q9805		30V 200mA 30V 200mA	3	D100E-SCHOTTKY	B240A	MPBAE014990		-	OK	B240A	-	30V 200mA 30V 200mA
27	Q9803	D100E-SWITCHING	75V 100mA SOT-23 100V 350mA SOT-23	1	Leshan Radio Company	LBAT54ALT1G	MPBAE015180	SMD	-	OK	LBAT54ALT1G	LBAT54ALT1G	75V 100mA SOT-23 100V 350mA SOT-23
28	Q9802, Q9803, Q9801, Q9810, Q9813, Q9811, Q9812, Q9813, Q9815, Q9816, Q9802, Q9803, Q9806, Q9807, Q9808, Q9809, Q9817, Q9806, Q9807, Q9810, Q9811, Q9814, Q9815, Q9816, Q9817		70V 200mA 100V 200mA SOT-323		Leshan Radio Company	LM0L6050T1G	MPBAE004910		-	OK	LM0L6050T1G	70V 200mA 100V 200mA SOT-323	

29	09801,09802	D100E-SWITCHING	30V 200mA	2	Leshan Radio Company	LBAT54CLTH	MPBAE015510	SMD	-	OK	LBAT54CLTH	LBAT54CLTH	30V 200mA
			30V 200mA		PANJIT	BAT54C	MPBAE015520		-	OK	BAT54C	-	30V 200mA
30	Z09801,Z09802,Z09804,Z09805	D100E-ZENER	12V 500mW SOT-123	4	Leshan Radio Company	LMS25242B	MPBAO026660	SMD	-	OK	LMS25242B	LMS25242B	12V 500mW SOT-123
			12V 500mW SOT-123		ONSEM	WMS25242BT1G	MPBAO001350		-	OK	WMS25242BT1G	-	12V 500mW SOT-123
31	Z09801,Z09802,Z09803,Z09804	D100E-ZENER	16.80V~19.10V 200mW	4	ONSEM	MM3218VT1G	MPBAO026590	SMD	-	OK	MM3218VT1G	MM3218VT1G	16.80V~19.10V 200mW
			18V 200mW SOD-323		Leshan Radio Company	LM3218VT1G	MPBAO026120		-	OK	LM3218VT1G	-	18V 200mW SOD-323
32	Z09802	D100E-ZENER	15.30V~17.10V 200mW SOD-323	1	ONSEM	MM3216VT1G	MPBAO027280	SMD	-	OK	MM3216VT1G	MM3216VT1G	15.30V~17.10V 200mW SOD-323
			16V 200mW SOD-323		Leshan Radio Company	LM3216VT1G	MPBAO027260		-	OK	LM3216VT1G	-	16V 200mW SOD-323
33	Z09803	D100E-ZENER	14.70~15.30V 225mW SOT-23	1	NXP	BZ84-B15	MPBAO027490	SMD	-	OK	BZ84-B15	BZ84-B15	BZ84-B15
			14.70~15.30V 250mW SOT-23		ONSEM	BZ84B15LT1G	MPBAO027480		-	OK	BZ84B15LT1G	-	BZ84B15LT1G
34	Z09801	D100E-ZENER	14.30~15.80V 200mW SOD-323	1	ONSEM	MM3215VT1G	MPBAO026580	SMD	-	OK	MM3215VT1G	MM3215VT1G	14.30~15.80V 200mW SOD-323
			15V 200mW SOD-323		Leshan Radio Company	LM3215VT1G	MPBAO026340		-	OK	LM3215VT1G	-	15V 200mW SOD-323
35	Z09803	D100E-ZENER	6.40~7.20V 200mW SOD-323	1	Leshan Radio Company	LM326V8	MPBAO017740	SMD	-	OK	LM326V8	LM326V8	6.40~7.20V 200mW SOD-323
			6.8V 200mW SOD-323		ONSEM	MM326V8T1G	MPBAO027270		-	OK	MM326V8T1G	-	6.8V 200mW SOD-323
36	CX802S	X-CAP	275V 0.68uF 10% 15m Pitch ↗-Forming	1	SUNIL ELECTRONICS	4360 275V 0.68uF K 15 ↗-Forming	MQAAB018310	Person	○	OK	4360 275V 0.68uF K	0.68uF_250V	275V 0.68uF 10% 15m Pitch ↗-Forming
			275V 0.68uF 10% 15m Pitch ↗-Forming		PILKOR ELECTRONICS	C FL PCX2 337F7P684S	MQAOF009340		○	OK	PCX2 337F7P684S	-	275V 0.68uF 10% 15m Pitch ↗-Forming
37	CX801S	X-CAP	275V 0.1uF 10% 15m Pitch	1	SUNIL ELECTRONICS	4360 275V 0.1uF K 15 1760	MQAOF009020	Person	○	OK	4360 275V 0.1uF K	0.1uF_250V	275V 0.1uF 10% 15m Pitch
			275V 0.1uF 10% 15m Pitch		PILKOR ELECTRONICS	PCX2 335 M5104	MQAOF009350		○	OK	PCX2 335 M5104	-	275V 0.1uF 10% 15m Pitch
38	CY807S	Y-CAP	400V 1nF STRAIGHT TYPE	1	DONGIL ELECTRONICS	DA20YE1026NSC04	MQCAA023560	Person	○	OK	DA20YE1026NSC04	1000pF_250V	400V 1nF STRAIGHT TYPE
			400V 1nF STRAIGHT TYPE		HONMING	DOF102M34Y5U060L0E0	MQCAA024870		○	OK	DOF102M34Y5U060L0E0	-	400V 1nF STRAIGHT TYPE
39	CY803S,CY804S	Y-CAP	400V 470pF STRAIGHT TYPE	2	HONMING	DOF471K34Y5P06JL0E0	MQCAA024860	Person	○	OK	DOF471K34Y5P06JL0E0	470pF_250V	400V 470pF STRAIGHT TYPE
			400V 470pF STRAIGHT TYPE		DONGIL ELECTRONICS	DA20YB471K8S204	MQCAA024800		○	OK	DA20YB471K8S204	-	400V 470pF STRAIGHT TYPE
40	CY801S,CY802S	Y-CAP	400V 100pF STRAIGHT	2	DONGIL ELECTRONICS	DA20YB101K8S024	MQCAA023570	Person	○	OK	DA20YB101K8S024	100pF_250V	400V 100pF STRAIGHT
			400V 100pF STRAIGHT		HONMING	DOF101K26Y5P06JL0E0	MQCAA024880		○	OK	DOF101K26Y5P06JL0E0	-	400V 100pF STRAIGHT
41	QP801S,QP802S	C-FILM	450V 1.0uF 10% 15m Pitch Straight (TOP 14mm)	2	PILKOR ELECTRONICS	POMP372 S00109	MQAAB018620	Person	○	OK	POMP372 S00109	1uF_450V	450V 1.0uF 10% 15m Pitch Straight (TOP 14mm)
			450V 1.0uF ±10%1785 S/C Straight (TOP 14mm)		SUNIL ELECTRONICS	460S 450V 1.0uF 10% 1785 P15mm S/C	MQAAB018660		○	OK	460S 450V 1.0uF 10% 1785 P15mm S/C	-	450V 1.0uF ±10%1785 S/C Straight (TOP 14mm)
42	QM808S	C-FILM	1250V 0.022uF 5% 15m Pitch Straight (TOP 14mm)	1	PILKOR ELECTRONICS	POMP 384 S0222	MQAAB018560	Person	○	OK	POMP 384 S0222	223/1250V	1250V 0.022uF 5% 15m Pitch Straight (TOP 14mm)
			1250V 223 J 15m 1785 S/C Straight (TOP 14mm)		SUNIL ELECTRONICS	5988 1250V 223 J 1785 S/C	MQAAB018650		○	OK	5988 1250V 223 J 1785 S/C	-	1250V 223 J 15m 1785 S/C Straight (TOP 14mm)
43	CS802	C-FILM	800V 2.2nF	1	SUNIL ELECTRONICS	S3052N222J S/C	MQAAB018200	Person	○	OK	S3052N222J S/C	222/800V	800V 2.2nF
			800V 222 K, Pitch 10mm, Lead 3.2mm		PILKOR ELECTRONICS	POMP 483S00035	MQAAB018300		○	OK	POMP 483S00035	-	800V 222 K, Pitch 10mm, Lead 3.2mm
44	C9901,C9902,C9903,C9904	C-FILM	250V 0.1uF 5% 10mmPitch, 3.4mmLead	4	PILKOR ELECTRONICS	C FL PDM 468 4M104	MQAAB018580	Person	○	OK	PDM 468 4M104	104/250V	250V 0.1uF 5% 10mmPitch, 3.4mmLead
			250V 0.1uF 10mm Pitch		SUNIL ELECTRONICS	C FL 230S 250V 104J P10mm S/C	MQAAB018570		○	OK	230S 250V 104J P10mm S/C	-	250V 0.1uF 10mm Pitch
45	QP811,QM812	C-CERAMIC	1KV 220pF KINK TYPE	2	DONGIL ELECTRONICS	CK3AYR221KF	MQCAA022140	Radial	○	OK	CK3AYR221KF	220pF/1KV	1KV 220pF KINK TYPE
			1KV 220pF		HONMING	DOH221K26R N6FJ5A0	MQCAAD028280		○	OK	DOH221K26R N6FJ5A0	-	1KV 220pF
46	CS809,QM808,QM809,QP813	C-CERAMIC	1KV 22pF KINK TYPE	4	DONGIL ELECTRONICS	CC3ASL220KF	MQCAA002940	Radial	○	OK	CC3ASL220KF	22pF/1KV	1KV 22pF KINK TYPE
			1KV 22pF Informing		HONMING	DOH220K22S N6FJ5A0	MQCAA025410		○	OK	DOH220K22S N6FJ5A0	-	1KV 22pF Informing
47	QP815S,QP816S	C-AL	450V 68uF 16~35.5 1.5 LB-FORMING	2	SAMSUNG	NZE 450V 68uF 16~35.5 1.5 LB-FORMING	MQEAA005310	Person	○	OK	NZE 450V 68uF	68uF_450V	450V 68uF 16~35.5 1.5 LB-FORMING
			450V 68uF 16~35.5 1.5 LB-FORMING		SAMHIIA	WL 450V 68uF 16~35.5 1.5 LB-FORMING	MQEAA005410		○	OK	WL 450V 68uF	-	450V 68uF 16~35.5 1.5 LB-FORMING
48	CS801	C-AL	450V 22uF 10~33 105°C 3.2 RB-Forming	1	SAMSUNG	NZE 450V 22uF 10~33 105°C 3.2 RB	MQEAA005370	Person	○	OK	NZE 450V 22uF	22uF_450V	450V 22uF 10~33 105°C 3.2 RB-Forming
			450V 22uF 10~30 105°C 3.2 RB-Forming		SAMHIIA	LU 450V 22uF 10~30 105°C 3.2 RB	MQEAA005370		○	OK	LU 450V 22uF	-	450V 22uF 10~30 105°C 3.2 RB-Forming
49	C9817,C9818,C9831,C9832	C-AL	250V 22uF 10~20 105°C 3.2 LB	4	SAMSUNG	BH 250V 22uF 10~20 105°C 3.2 LB	MQEAA005340	Person	○	OK	BH 250V 22uF	22uF_250V	250V 22uF 10~20 105°C 3.2 LB
			250V 22uF 10~20 105°C 3.2 LB		SAMHIIA	NFS 250V 22uF 10~20 105°C 3.2 LB	MQEAA005380		○	OK	NFS 250V 22uF	-	250V 22uF 10~20 105°C 3.2 LB
50	QM815,QM819	C-AL	200V 100uF 12.5~30 105°C 3.2 LB	2	SAMSUNG	NZE 200V 100uF 12.5~30 105°C 3.2 LB	MQEAA005510	Person	○	OK	NZE 200V 100uF	100uF_200V	NZE 200V 100uF 12.5~30 105°C 3.2 LB
			200V 100uF 12.5~30 105°C 3.2 LB		SAMHIIA	LU 200V 100uF 12.5~30 105°C 3.2 LB	MQEAA005730		○	OK	LU 200V 100uF	-	LU 200V 100uF 12.5~30 105°C 3.2 LB

51	CM803, CM804, CM820, CS825	C-AL	25V 470uF 10+12.5 25V 470uF 10+12.5	4	SAMYOUNG SAMHIIA	10B 25V 470uF 10+12.5 MK 25V 470uF 10+12.5	MQEEA095250 MQEEA095260	Radial	○ ○	OK OK	10B 25V 470uF MK 25V 470uF	470uF 25V -	10B 25V 470uF 10+12.5 MK 25V 470uF 10+12.5	
52	CS811, CS812	C-AL	16V 2200uF 10+25 3.2 LB-FORMING 16V 2200uF 10+30 DL-FORMING	2	SAMYOUNG SAMHIIA	10B 16V 2200uF 10+25 3.2 LB-FORMING MK 16V 2200uF 10+30 DL-FORMING	MQEEA095320 MQEEA095330	Person	○ ○	OK OK	10B 16V 2200uF MK 16V 2200uF	2200uF 16V -	16V 2200uF 10+25 3.2 LB-FORMING 16V 2200uF 10+30 DL-FORMING	
53	CS808		50V 47uF 6.3+11 105°C 3.2 LB-FORMING 50V 47uF 6.3+11 3.2 DL-FORMING		SAMYOUNG SAMHIIA	N0H 50V 47uF 6.3+11 3.2 LB-FORMING LZ 50V 47uF 6.3+11 3.2 DL-FORMING	MQEEA087700 MQEEA093660		○ ○	OK OK	N0H 50V 47uF LZ 50V 47uF	47uF 50V -	N0H 50V 47uF 6.3+11 3.2 LB-FORMING LZ 50V 47uF 6.3+11 3.2 DL-FORMING	
54	CS803, CM816	C-AL	50V 22uF 6.3+7 105°C 50V 22uF 6.3+7 105°C	2	SAMHIIA SAMYOUNG	ZS 50V 22uF 6.3+7 105°C ST/P 10B 50V 22uF 6.3+7 105°C	MQEEA092020 MQEEA091960	Radial	○ ○	OK OK	ZS 50V 22uF 10B 50V 22uF	22uF 50V -	ZS 50V 22uF 6.3+7 105°C ST/P 10B 50V 22uF 6.3+7 105°C	
55	CM815, CM816, CM801, CM802, CM818		2012, 1uF(105)K 25V 2012, 1uF(105)K 25V		SEMC TOK	CL218105KAFNNNE C2012XTR1E105KT	MQCA002330 MQCA002180		○ ○	OK OK	- -	105/25V(2012) -	2012, 1uF(105)K 25V 2012, 1uF(105)K 25V	
56	CP903, CP910, CS804, CS817, CS819, CS821, CS817, CS818, CM806, CM810, CM821, CM822, CM807, CS808	C-MLCC CHIP	2012, 220nF(224)K 50V 2012, 220nF(224)K 50V	15	SEMC TOK	CL218224KGNNN C2012XTR1H224K	MQCA001750 MQCA002610	SMD	○ ○	OK OK	- -	224/50V(2012) -	2012, 220nF(224)K 50V 2012, 220nF(224)K 50V	
57	CP906, CP907, CS805, CS818, CS804, CS835, CS836, CS838, CS842, CS844, CS850, CS851, CS852, CS853, CS858		2012, 100nF(104)K 50V 2012, 100nF(104)K 50V		SEMC TOK	CL218104KGN C2012XTR1H104K	MQCA0005410 MQCA002010		○ ○	OK OK	- -	104/50V(2012) -	2012, 100nF(104)K 50V 2012, 100nF(104)K 50V	
58	CS854, CS855, CS856, CS857	C-MLCC CHIP	2012, 10nF(103)J 25V 2012, 10nF(103)J 50V	4	SEMC TOK	CL21C103JBNNNE C20120201H103JT	MQCA0026310 MQCA0026260	SMD	○ ○	OK OK	- -	103/25V(2012) -	2012, 10nF(103)J 25V 2012, 10nF(103)J 50V	
59	CS937, C9441, C9443, C9445		2012, 4.7nF(472)J 50V 2012, 4.7nF(472)J 50V		SEMC TOK	CL21C472JBNNNE C20120201H472JT	MQCA0026300 MQCA0026400		○ ○	OK OK	- -	472/50V(2012) -	2012, 4.7nF(472)J 50V 2012, 4.7nF(472)J 50V	
60	CS959, CS964, CS965, CS966	C-MLCC CHIP	2012, 470pF(471)J 50V 2012, 470pF(471)J 50V	4	SEMC TOK	CL218471KBN C2012XTR1H471K	MQCA0005710 MQCA0000510	SMD	○ ○	OK OK	- -	471/50V(2012) -	2012, 470pF(471)J 50V 2012, 470pF(471)J 50V	
61	CM805, CM814		160B, 22nF(223)K 50V 160B, 22nF(223)K 50V		SEMC TOK	Q108223KGBNNNC C1608XTR1H223K	MQCA0000790 MQCA0019810		○ ○	OK OK	- -	223/50V(160B) -	160B, 22nF(223)K 50V 160B, 22nF(223)K 50V	
62	CP908	C-MLCC CHIP	160B, 2.2nF(222)K 50V 160B, 2.2nF(222)K 50V	1	SEMC TOK	Q108222KGBNNNC C1608XTR1H222K	MQCA0000660 MQCA0026590	SMD	○ ○	OK OK	- -	222/50V(160B) -	160B, 2.2nF(222)K 50V 160B, 2.2nF(222)K 50V	
63	CS815		160B, 220pF(221)J 50V 160B, 220pF(221)J 50V		SEMC TOK	Q10221JBNNNC C1608C001H221J	MQCA0025600 MQCA0000710		○ ○	OK OK	- -	221/50V(160B) -	160B, 220pF(221)J 50V 160B, 220pF(221)J 50V	
64	CS807, CS814, CM811, CM813, CM817, CM823, CS800, CS801, CS802, CS803, CS839	C-MLCC CHIP	160B, 100nF(104)K 50V 160B, 100nF(104)K 50V	11	SEMC TOK	Q108104KBN C1608XTR1H104K	MQCA0017330 MQCA0018410	SMD	○ ○	OK OK	- -	104/50V(160B) -	160B, 100nF(104)K 50V 160B, 100nF(104)K 50V	
65	CP904, CS806, CS816, CM824, CS809, CS910, CS919, CS920, CS923, CS924		160B, 10nF(103)K 50V 160B, 10nF(103)K 50V		SEMC TOK	Q108103KBN C1608XTR1H103K	MQCA0000680 MQCA0020310		○ ○	OK OK	- -	103/50V(160B) -	160B, 10nF(103)K 50V 160B, 10nF(103)K 50V	
66	CP905, CP902, CS905, CS906, CS911, CS912, CS913, CS914, CS921, CS922, CS925, CS926, CS929, CS930, CS933, CS934	C-MLCC CHIP	160B, 1nF(102)J 50V 160B, 1nF(102)K 50V	16	SEMC TOK	Q101C102JBNC C1608XTR1H102K	MQCA0017930 MQCA0018710	SMD	○ ○	OK OK	- -	102/50V(160B) -	160B, 1nF(102)J 50V 160B, 1nF(102)K 50V	
67	CP914		160B, 470pF(471)J 50V 160B, 470pF(471)J 50V		SEMC TOK	Q104C471JBNC C1608C001H101J	MQCA0000740 MQCA0026280		○ ○	OK OK	- -	471/50V(160B) -	160B, 470pF(471)J 50V 160B, 470pF(471)J 50V	
68	CS915, CS916, C9627, C9628	C-MLCC CHIP	160B, 330pF(331)J 50V 160B, 330pF(331)K 50V	4	SEMC TOK	Q10C331JBNC C1608XTR1H331KT	MQCA0000750 MQCA001450	SMD	○ ○	OK OK	- -	331/50V(160B) -	160B, 330pF(331)J 50V 160B, 330pF(331)K 50V	
69	CS960, CS961, C9662, C9663		160B, 100pF(101)J 50V 160B, 100pF(101)J 50V		SEMC TOK	Q10C101JBNC C1608C001H101J	MQCA0000820 MQCA0019610		○ ○	OK OK	- -	101/50V(160B) -	160B, 100pF(101)J 50V 160B, 100pF(101)J 50V	
70	BE9801, BE9802	BEAD-CHIP	35Ω 3216 35Ω 3216	2	SUNLORD TECSTAR	PZ23160350 T1321611U305002	MFBAD0002630 MFBAD0002830	SMD	- -	OK OK	- -	PZ23160350 -	35Ω 3216 35Ω 3216	
71	BE9801, BE9802, BE9803, BE9804		60Ω 2012 60Ω 2012		SUNLORD TECSTAR	GZ201206001F T120120926005008	MFBAD0002730 MFBAD0002840		- -	OK OK	- -	GZ201206001F -	60Ω 2012 60Ω 2012	
72	RL801S	RELAY-POWER	250Vac 5A 5VDC	1	FUJITSU	FTR-F3PA005V	MFRHA000320	Person	-	OK	FTR-F3PA005V	250Vac 5A 5VDC	-	-
									-	OK	-	-	-	

73	R9800	VR	1/2W 20KΩ TOP 1/2W 20KΩ TOP	1	COPAL BECKMAN	FT-63ETP 203 ZSPRE 203	MQAA0203120 MQAA0203110	Radial	○ ○	OK OK	FT-63ETP 203 ZSPRE 203	20KJ_1/2W	1/2W 20KΩ TOP
74	RS802,RS804	R-METAL OXIDE	2W 100KΩ J AXIAL 2W 100KΩ J AXIAL	2	PILKOR ELECTRONICS ABCO ELECTRONICS	R MTL 0X 2W 100KΩ J MOR 2W 100KΩ J TB	MQAAC017110 MQAAC004210	Axial	○ ○	OK OK	R MTL 0X 2W 100KΩ J MOR 2W 100KΩ J TB	100K/2W	2W 100KΩ J AXIAL 2W 100KΩ J AXIAL
			2W 47KΩ J AXIAL 2W 47KΩ J AXIAL		PILKOR ELECTRONICS ABCO ELECTRONICS	PPAR 2W 194 53473 MOR 2W 47KΩ J TB	MQAAC010910 MQAAC042230	Axial	○ ○	OK OK	PPAR 2W 194 53473 MOR 2W 47KΩ J TB	47K/2W	2W 47KΩ J AXIAL 2W 47KΩ J AXIAL
75	RM838	R-METAL OXIDE	2W 4.7Ω J AXIAL 2W 4.7Ω J AXIAL	1	PILKOR ELECTRONICS ABCO ELECTRONICS	PPAR 2W 194 53478 MOR 2W 4.7Ω J TB	MQAAC019340 MQAAC042240	Axial	○ ○	OK OK	PPAR 2W 194 53478 MOR 2W 4.7Ω J TB	4.7J/2W	2W 4.7Ω J AXIAL 2W 4.7Ω J AXIAL
			2W 3.3Ω F AXIAL 2W 3.3Ω F AXIAL		PILKOR ELECTRONICS SMART ELECTRONICS	R W PWR 172 73308 R W PWR02 T1F 3R30	MQAEE007760 MQAAE008010	Axial	○ ○	OK OK	R W PWR 172 73308 R W PWR02 T1F 3R30	3.3J/2W	2W 3.3Ω F AXIAL 2W 3.3Ω F AXIAL
76	RP817	R-METAL OXIDE	2W 0.51Ω J AXIAL 2W 0.51Ω J AXIAL	1	SMART ELECTRONICS PILKOR ELECTRONICS	R W SMW 02 T1 J R510 R W PWR 272 55510	MQAEE007670 MQAAE007650	Axial	○ ○	OK OK	R W SMW 02 T1 J R510 R W PWR 272 55510	0.51J/2W	2W 0.51Ω J AXIAL 2W 0.51Ω J AXIAL
			2W 0.12Ω J AXIAL 2W 0.12Ω J AXIAL		SMART ELECTRONICS PILKOR ELECTRONICS	R W SMW02T1JR120 R W PWR272 55120	MQAEE007240 MQAAE007230	Axial	○ ○	OK OK	R W SMW02T1JR120 R W PWR272 55120	0.12J/2W	2W 0.12Ω J AXIAL 2W 0.12Ω J AXIAL
78	RS805	R-Wire Wound	1/4W 2MΩ F 3216 1/4W 2MΩ F 3216	8	YAGEO SEMC	RC1206FR-07 2MIL RC3216F2004CS	MQAAG084270 —	SMD	○ ○	OK OK	RC1206FR-07 2MIL RC3216F2004CS	2M(3216)F	1/4W 2MΩ F 3216 1/4W 2MΩ F 3216
			1/4W 1MΩ F 3216 1/4W 1MΩ F 3216		YAGEO SEMC	RC1206FR-07 1MIL RC3216F1004CS	MQAAG039220 —	SMD	○ ○	OK OK	RC1206FR-07 1MIL RC3216F1004CS	1M(3216)F	1/4W 1MΩ F 3216 1/4W 1MΩ F 3216
80	RP823,RP824,RP825,RP826,RP829,RP830,RP831,RP832	R-QHP	1/4W 470KΩ J 3216 1/4W 470KΩ J 3216	4	YAGEO SEMC	RC1206JR-07 470KL RC3216J474CS	MQAAG074530 —	SMD	○ ○	OK OK	RC1206JR-07 470KL RC3216J474CS	470K(3216)J	1/4W 470KΩ J 3216 1/4W 470KΩ J 3216
			1/4W 100Ω F 3216 1/4W 100Ω F 3216		YAGEO SEMC	RC1206FR-07 220KL RC3216F2203CS	MQAAG084830 —	SMD	○ ○	OK OK	RC1206FR-07 220KL RC3216F2203CS	220K(3216)F	1/4W 100Ω F 3216 1/4W 100Ω F 3216
82	R8015,R8025,R8033,R8045	R-QHP	1/4W 1kΩ F 3216 1/4W 1kΩ F 3216	6	YAGEO SEMC	RC1206JR-07 470KL RC3216J474CS	MQAAG074530 —	SMD	○ ○	OK OK	RC1206JR-07 470KL RC3216J474CS	470K(3216)J	1/4W 1kΩ F 3216 1/4W 1kΩ F 3216
			1/4W 100Ω F 3216 1/4W 100Ω F 3216		YAGEO SEMC	RC1206FR-07 100L RC3216F1000CS	MQAAG084320 —	SMD	○ ○	OK OK	RC1206FR-07 100L RC3216F1000CS	100R(3216)F	1/4W 100Ω F 3216 1/4W 100Ω F 3216
84	R807,R809,R9012,R9013,R9014,R9015	R-QHP	1/4W 1kΩ F 3216 1/4W 1kΩ F 3216	6	YAGEO SEMC	RC1206FR-07 1KL RC3216F1001CS	MQAAG026220 —	SMD	○ ○	OK OK	RC1206FR-07 1KL RC3216F1001CS	1K(3216)F	1/4W 1kΩ F 3216 1/4W 1kΩ F 3216
			1/4W 100Ω F 3216 1/4W 100Ω F 3216		YAGEO SEMC	RC1206FR-07 100L RC3216F1000CS	MQAAG084320 —	SMD	○ ○	OK OK	RC1206FR-07 100L RC3216F1000CS	100R(3216)F	1/4W 100Ω F 3216 1/4W 100Ω F 3216
85	RP808,RP809	R-QHP	1/4W 220KΩ F 3216 1/4W 220KΩ F 3216	2	YAGEO SEMC	RC1206FR-07 220L RC3216F1820CS	MQAAG084320 —	SMD	○ ○	OK OK	RC1206FR-07 220L RC3216F1820CS	220K(3216)F	1/4W 220KΩ F 3216 1/4W 220KΩ F 3216
			1/4W 47Ω F 3216 1/4W 47Ω F 3216		YAGEO SEMC	RC1206FR-07 47L RC3216F4790CS	MQAAG029820 —	SMD	○ ○	OK OK	RC1206FR-07 47L RC3216F4790CS	47R(3216)F	1/4W 47Ω F 3216 1/4W 47Ω F 3216
87	R803,R808	R-QHP	1/4W 1.2Ω F 3216 1/4W 1.2Ω F 3216	2	YAGEO SEMC	RC1206FR-07 1.2L RC3216F1820CS	MQAAG085150 —	SMD	○ ○	OK OK	RC1206FR-07 1.2L RC3216F1820CS	1.2R(3216)F	1/4W 1.2Ω F 3216 1/4W 1.2Ω F 3216
			1/8W 680KΩ F 2012 1/8W 680KΩ F 2012		YAGEO SEMC	RC0805FR-07 680K RC0805F6803CS	MQAAG052660 —	SMD	○ ○	OK OK	RC0805FR-07 680K RC0805F6803CS	680K(2012)F	1/8W 680KΩ F 2012 1/8W 680KΩ F 2012
88	RM804	R-QHP	1/8W 220KΩ F 2012 1/8W 220KΩ F 2012	1	YAGEO SEMC	RC0805FR-07 220K RC0805F2203CS	MQAAG054620 —	SMD	○ ○	OK OK	RC0805FR-07 220K RC0805F2203CS	220K(2012)F	1/8W 220KΩ F 2012 1/8W 220KΩ F 2012
			1/8W 220KΩ F 2012 1/8W 220KΩ F 2012		YAGEO SEMC	RC0805FR-07 220K RC0805F2203CS	MQAAG054620 —	SMD	○ ○	OK OK	RC0805FR-07 220K RC0805F2203CS	220K(2012)F	1/8W 220KΩ F 2012 1/8W 220KΩ F 2012
89	RP833	R-QHP	1/8W 120KΩ F 2012 1/8W 120KΩ F 2012	1	YAGEO SEMC	RC0805FR-07 120K RC0805F1203CS	MQAAG061520 —	SMD	○ ○	OK OK	RC0805FR-07 120K RC0805F1203CS	120K(2012)F	1/8W 120KΩ F 2012 1/8W 120KΩ F 2012
			1/8W 100Ω F 2012 1/8W 100Ω F 2012		YAGEO SEMC	RC0805FR-07 10K RC0805F1002CS	MQAAG041310 —	SMD	○ ○	OK OK	RC0805FR-07 10K RC0805F1002CS	10K(2012)F	1/8W 100Ω F 2012 1/8W 100Ω F 2012
91	RM807,RM808,RM809,RM810,RM811,RM812	R-QHP	1/8W 22KΩ F 2012 1/8W 22KΩ F 2012	6	YAGEO SEMC	RC0805FR-07 22K RC0805F2202CS	MQAAG041310 —	SMD	○ ○	OK OK	RC0805FR-07 22K RC0805F2202CS	22K(2012)F	1/8W 22KΩ F 2012 1/8W 22KΩ F 2012
			1/8W 10KΩ F 2012 1/8W 10KΩ F 2012		YAGEO SEMC	RC0805FR-07 10K RC0805F1002CS	MQAAG03510 —	SMD	○ ○	OK OK	RC0805FR-07 10K RC0805F1002CS	10K(2012)F	1/8W 10KΩ F 2012 1/8W 10KΩ F 2012
92	RP812,RP813,RM819,RM820	R-QHP	1/8W 3.3KΩ F 2012 1/8W 3.3KΩ F 2012	6	YAGEO SEMC	RC0805FR-07 3.3K RC0805F3301CS	MQAAG0241080 —	SMD	○ ○	OK OK	RC0805FR-07 3.3K RC0805F3301CS	3.3K(2012)F	1/8W 3.3KΩ F 2012 1/8W 3.3KΩ F 2012
			1/8W 2KΩ F 2012 1/8W 2KΩ F 2012		YAGEO SEMC	RC0805FR-07 2K RC0805F2001CS	MQAAG012310 —	SMD	○ ○	OK OK	RC0805FR-07 2K RC0805F2001CS	2K(2012)F	1/8W 2KΩ F 2012 1/8W 2KΩ F 2012
93	RM850,RM851,RM852,RM853,RM854,RM855	R-QHP	1/8W 2KΩ F 2012 1/8W 2KΩ F 2012	1	YAGEO SEMC	RC0805FR-07 2K RC0805F2001CS	MQAAG012310 —	SMD	○ ○	OK OK	RC0805FR-07 2K RC0805F2001CS	2K(2012)F	1/8W 2KΩ F 2012 1/8W 2KΩ F 2012
			1/8W 2KΩ F 2012 1/8W 2KΩ F 2012		YAGEO SEMC	RC0805FR-07 2K RC0805F2001CS	MQAAG012310 —	SMD	○ ○	OK OK	RC0805FR-07 2K RC0805F2001CS	2K(2012)F	1/8W 2KΩ F 2012 1/8W 2KΩ F 2012

95	RS809,RS825	R-QHP	1/8W 910Ω F 2012 1/8W 910Ω F 2012	2	YAGEO SEMCO	RC0805FR-07 910 RC0805F9100CS	MQAAG0255930 —	SMD	○ ○	OK OK	RC0805FR-07 910 RC0805F9100CS	910R(2012)F —	1/8W 910Ω F 2012 1/8W 910Ω F 2012
96	RS815,RS819	R-QHP	1/8W 330Ω F 2012 1/8W 330Ω F 2012	2	YAGEO SEMCO	RC0805FR-07 330 RC0805F3300CS	MQAAG013210 —	SMD	○ ○	OK OK	RC0805FR-07 330 RC0805F3300CS	330R(2012)F —	1/8W 330Ω F 2012 1/8W 330Ω F 2012
97	RS808	R-QHP	1/8W 220Ω F 2012 1/8W 220Ω F 2012	1	YAGEO SEMCO	RC0805FR-07 220 RC0805F2200CS	MQAAG0254610 —	SMD	○ ○	OK OK	RC0805FR-07 220 RC0805F2200CS	220R(2012)F —	1/8W 220Ω F 2012 1/8W 220Ω F 2012
98	RP850	R-QHP	1/8W 100Ω F 2012 1/8W 100Ω F 2012	1	YAGEO SEMCO	RC0805FR-07 100 RC0805F1000CS	MQAAG021220 —	SMD	○ ○	OK OK	RC0805FR-07 100 RC0805F1000CS	100R(2012)F —	1/8W 100Ω F 2012 1/8W 100Ω F 2012
99	RS820	R-QHP	1/8W 68Ω F 2012 1/8W 68Ω F 2012	1	YAGEO SEMCO	RC0805FR-07 68 RC0805F6800CS	MQAAG0073230 —	SMD	○ ○	OK OK	RC0805FR-07 68 RC0805F6800CS	68R(2012)F —	1/8W 68Ω F 2012 1/8W 68Ω F 2012
100	RP814,RP816,RP817	R-QHP	1/8W 47Ω F 2012 1/8W 47Ω F 2012	3	YAGEO SEMCO	RC0805FR-07 47 RC0805F4700CS	MQAAG041820 —	SMD	○ ○	OK OK	RC0805FR-07 47 RC0805F4700CS	47R(2012)F —	1/8W 47Ω F 2012 1/8W 47Ω F 2012
101	RP815,RP813,RP814,RP815	R-QHP	1/8W 22Ω F 2012 1/8W 22Ω F 2012	4	YAGEO SEMCO	RC0805FR-07 22 RC0805F2200CS	MQAAG010030 —	SMD	○ ○	OK OK	RC0805FR-07 22 RC0805F2200CS	22R(2012)F —	1/8W 22Ω F 2012 1/8W 22Ω F 2012
102	RP806,RP807,RP810,RP811	R-QHP	1/8W 10Ω F 2012 1/8W 10Ω F 2012	4	YAGEO SEMCO	RC0805FR-07 10 RC0805F1000CS	MQAAG023620 —	SMD	○ ○	OK OK	RC0805FR-07 10 RC0805F1000CS	10R(2012)F —	1/8W 10Ω F 2012 1/8W 10Ω F 2012
103	RP805	R-QHP	1/10W 1.2MΩ F 1608 1/10W 1.2MΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 1.2M RC0603F1204CS	MQAAG0277930 —	SMD	○ ○	OK OK	RC0603FR-07 1.2M RC0603F1204CS	1.2M(1608)F —	1/10W 1.2MΩ F 1608 1/10W 1.2MΩ F 1608
104	RP835,RP842,RP846,RP847,RP825	R-QHP	1/10W 1MΩ F 1608 1/10W 1MΩ F 1608	5	YAGEO SEMCO	RC0603FR-07 1M RC0603F1004CS	MQAAG0267020 —	SMD	○ ○	OK OK	RC0603FR-07 1M RC0603F1004CS	1M(1608)F —	1/10W 1MΩ F 1608 1/10W 1MΩ F 1608
105	RP827,RP815	R-QHP	1/10W 470KΩ F 1608 1/10W 470KΩ F 1608	2	YAGEO SEMCO	RC0603FR-07 470K RC0603F4703CS	MQAAG0078110 —	SMD	○ ○	OK OK	RC0603FR-07 470K RC0603F4703CS	470K(1608)F —	1/10W 470KΩ F 1608 1/10W 470KΩ F 1608
106	RP827	R-QHP	1/10W 180KΩ F 1608 1/10W 180KΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 180K RC0603F1803CS	MQAAG0078210 —	SMD	○ ○	OK OK	RC0603FR-07 180K RC0603F1803CS	180K(1608)F —	1/10W 180KΩ F 1608 1/10W 180KΩ F 1608
107	RS821,RS823	R-QHP	1/10W 150KΩ F 1608 1/10W 150KΩ F 1608	2	YAGEO SEMCO	RC0603FR-07 150K RC0603F1503CS	MQAAG0263330 —	SMD	○ ○	OK OK	RC0603FR-07 150K RC0603F1503CS	150K(1608)F —	1/10W 150KΩ F 1608 1/10W 150KΩ F 1608
108	RS806,RS826,RP844,RP845,R8977,R8978,R8986,R8987	R-QHP	1/10W 100KΩ F 1608 1/10W 100KΩ F 1608	8	YAGEO SEMCO	RC0603FR-07 100K RC0603F1003CS	MQAAG0280020 —	SMD	○ ○	OK OK	RC0603FR-07 100K RC0603F1003CS	100K(1608)F —	1/10W 100KΩ F 1608 1/10W 100KΩ F 1608
109	RP805,RP828,RP834	R-QHP	1/10W 68KΩ F 1608 1/10W 68KΩ F 1608	3	YAGEO SEMCO	RC0603FR-07 68K RC0603F6802CS	MQAAG0261620 —	SMD	○ ○	OK OK	RC0603FR-07 68K RC0603F6802CS	68K(1608)F —	1/10W 68KΩ F 1608 1/10W 68KΩ F 1608
110	RP804	R-QHP	1/10W 51KΩ F 1608 1/10W 51KΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 51K RC0603F5102CS	MQAAG0272230 —	SMD	○ ○	OK OK	RC0603FR-07 51K RC0603F5102CS	51K(1608)F —	1/10W 51KΩ F 1608 1/10W 51KΩ F 1608
111	RP826	R-QHP	1/10W 47KΩ F 1608 1/10W 47KΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 47K RC0603F4702CS	MQAAG0064520 —	SMD	○ ○	OK OK	RC0603FR-07 47K RC0603F4702CS	47K(1608)F —	1/10W 47KΩ F 1608 1/10W 47KΩ F 1608
112	RS827	R-QHP	1/10W 43KΩ F 1608 1/10W 43KΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 43K RC0603F4302CS	MQAAG0080820 —	SMD	○ ○	OK OK	RC0603FR-07 43K RC0603F4302CS	43K(1608)F —	1/10W 43KΩ F 1608 1/10W 43KΩ F 1608
113	RP801,RP830,RP831,RP857,RP858	R-QHP	1/10W 27KΩ F 1608 1/10W 27KΩ F 1608	5	YAGEO SEMCO	RC0603FR-07 27K RC0603F2702CS	MQAAG0259680 —	SMD	○ ○	OK OK	RC0603FR-07 27K RC0603F2702CS	27K(1608)F —	1/10W 27KΩ F 1608 1/10W 27KΩ F 1608
114	RS818	R-QHP	1/10W 24KΩ F 1608 1/10W 24KΩ F 1608	1	YAGEO SEMCO	RC0603FR-07 24K RC0603F2402CS	MQAAG0269910 —	SMD	○ ○	OK OK	RC0603FR-07 24K RC0603F2402CS	24K(1608)F —	1/10W 24KΩ F 1608 1/10W 24KΩ F 1608
115	RS801,RS817,RP822,RP802,RP807,RP893	R-QHP	1/10W 20KΩ F 1608 1/10W 20KΩ F 1608	6	YAGEO SEMCO	RC0603FR-07 20K RC0603F2002CS	MQAAG0264870 —	SMD	○ ○	OK OK	RC0603FR-07 20K RC0603F2002CS	20K(1608)F —	1/10W 20KΩ F 1608 1/10W 20KΩ F 1608
116	RP821,RP853,RP895,RP897,RP899	R-QHP	1/10W 18KΩ F 1608 1/10W 18KΩ F 1608	5	YAGEO SEMCO	RC0603JR-07 18K RC0603F1802CS	MQAAG0268120 —	SMD	○ ○	OK OK	RC0603JR-07 18K RC0603F1802CS	18K(1608)F —	1/10W 18KΩ F 1608 1/10W 18KΩ F 1608

117	R6800, R6993	R-QHP	1/10W 12KΩ F 1608 1/10W 12KΩ F 1608	2	YAGEO SEMCO	R00603JR-07 12K R00603F1202CS	MQAAG066610 -	SMD	○ ○	OK OK	R00603JR-07 12K R00603F1202CS	- -	12K(1608)F 1/10W 12KΩ F 1608	1/10W 12KΩ F 1608
118	R6802, R6826, R6828, R6831, R6835, R6836, R6838, R6839, R6842, R6844, R6845, R6846, R6848, R6849, R6850, R6851, R6852, R6853, R6854, R6855, R6856, R6857, R6859, R6860, R6861, R6862, R6863, R6864, R6865, R6866, R6867, R6868, R6869, R6870	R-QHP	1/10W 10KΩ F 1608 1/10W 10KΩ F 1608	20	YAGEO SEMCO	R00603FR-07 10K R00603F1002CS	MQAAG067220 -	SMD	○ ○	OK OK	R00603FR-07 10K R00603F1002CS	- -	10K(1608)F 1/10W 10KΩ F 1608	1/10W 10KΩ F 1608
119	R6806	R-QHP	1/10W 6.8KΩ F 1608 1/10W 6.8KΩ F 1608		1	YAGEO SEMCO	R00603FR-07 6.8K R00603F6801CS	MQAAG065120 -	○ ○	OK OK	R00603FR-07 6.8K R00603F6801CS	- -	6.8K(1608)F 1/10W 6.8KΩ F 1608	1/10W 6.8KΩ F 1608
120	R6830, R6831, R6844, R6847, R6857, R6870	R-QHP	1/10W 5.6KΩ F 1608 1/10W 5.6KΩ F 1608	6	YAGEO SEMCO	R00603FR-07 5.6K R00603F5601CS	MQAAG069440 -	SMD	○ ○	OK OK	R00603FR-07 5.6K R00603F5601CS	- -	5.6K(1608)F 1/10W 5.6KΩ F 1608	1/10W 5.6KΩ F 1608
121	R6816, R6801, R6851, R6852, R6866, R6874, R6882, R6883	R-QHP	1/10W 4.7KΩ F 1608 1/10W 4.7KΩ F 1608		8	YAGEO SEMCO	R00603JR-07 4.7K R00603F4701CS	MQAAG063610 -	○ ○	OK OK	R00603JR-07 4.7K R00603F4701CS	- -	4.7K(1608)F 1/10W 4.7KΩ F 1608	1/10W 4.7KΩ F 1608
122	R6825	R-QHP	1/10W 3.6KΩ F 1608 1/10W 3.6KΩ F 1608	1	YAGEO SEMCO	R00603FR-07 3.6K R00603F3601CS	MQAAG0640220 -	SMD	○ ○	OK OK	R00603FR-07 3.6K R00603F3601CS	- -	3.6K(1608)F 1/10W 3.6KΩ F 1608	1/10W 3.6KΩ F 1608
123	R6804	R-QHP	1/10W 3KΩ F 1608 1/10W 3KΩ F 1608		1	YAGEO SEMCO	R00603FR-07 3K R00603F3001CS	MQAAG076820 -	○ ○	OK OK	R00603FR-07 3K R00603F3001CS	- -	3K(1608)F 1/10W 3KΩ F 1608	1/10W 3KΩ F 1608
124	R6802, R6832	R-QHP	1/10W 2.7KΩ F 1608 1/10W 2.7KΩ F 1608	2	YAGEO SEMCO	R00603FR-07 2.7K R00603F2701CS	MQAAG068320 -	SMD	○ ○	OK OK	R00603FR-07 2.7K R00603F2701CS	- -	2.7K(1608)F 1/10W 2.7KΩ F 1608	1/10W 2.7KΩ F 1608
125	R6811, R6982	R-QHP	1/10W 2KΩ F 1608 1/10W 2KΩ F 1608		2	YAGEO SEMCO	R00603FR-07 2K R00603F2001CS	MQAAG068420 -	○ ○	OK OK	R00603FR-07 2K R00603F2001CS	- -	2K(1608)F 1/10W 2KΩ F 1608	1/10W 2KΩ F 1608
126	R6829	R-QHP	1/10W 1.6KΩ F 1608 1/10W 1.6KΩ F 1608	1	YAGEO SEMCO	R00603FR-07 1.6K R00603F1601CS	MQAAG073420 -	SMD	○ ○	OK OK	R00603FR-07 1.6K R00603F1601CS	- -	1.6K(1608)F 1/10W 1.6KΩ F 1608	1/10W 1.6KΩ F 1608
127	R6824	R-QHP	1/10W 1.5KΩ F 1608 1/10W 1.5KΩ F 1608		1	YAGEO SEMCO	R00603FR-07 1.5K R00603F1501CS	MQAAG073440 -	○ ○	OK OK	R00603FR-07 1.5K R00603F1501CS	- -	1.5K(1608)F 1/10W 1.5KΩ F 1608	1/10W 1.5KΩ F 1608
128	R6875, R6876, R6884, R6885	R-QHP	1/10W 1.3KΩ F 1608 1/10W 1.3KΩ F 1608	4	YAGEO SEMCO	R00603FR-07 1.3K R00603F1301CS	MQAAG068520 -	SMD	○ ○	OK OK	R00603FR-07 1.3K R00603F1301CS	- -	1.3K(1608)F 1/10W 1.3KΩ F 1608	1/10W 1.3KΩ F 1608
129	R6803, R6804, R6821, R6824, R6810, R6823, R6828, R6829, R6834, R6835, R6838, R6840, R6841, R6859, R6860, R6865, R6873, R6881, R6891, R6892, R6902, R6935	R-QHP	1/10W 1KΩ F 1608 1/10W 1KΩ F 1608		22	YAGEO SEMCO	R00603FR-07 1K R00603F1001CS	MQAAG068620 -	○ ○	OK OK	R00603FR-07 1K R00603F1001CS	- -	1K(1608)F 1/10W 1KΩ F 1608	1/10W 1KΩ F 1608
130	R6890, R6894, R6903	R-QHP	1/10W 910Ω F 1608 1/10W 910Ω F 1608	3	YAGEO SEMCO	R00603FR-07 910 R00603F9100CS	MQAAG0259750 -	SMD	○ ○	OK OK	R00603FR-07 910 R00603F9100CS	- -	910R(1608)F 1/10W 910Ω F 1608	1/10W 910Ω F 1608
131	R6803	R-QHP	1/10W 820Ω F 1608 1/10W 820Ω F 1608		1	YAGEO SEMCO	R00603FR-07 820 R00603F8200CS	MQAAG038740 -	○ ○	OK OK	R00603FR-07 820 R00603F8200CS	- -	820R(1608)F 1/10W 820Ω F 1608	1/10W 820Ω F 1608
132	R6817, R6818, R6819, R6820	R-QHP	1/10W 750Ω F 1608 1/10W 750Ω F 1608	4	YAGEO SEMCO	R00603FR-07 750 R00603F7500CS	MQAAG072630 -	SMD	○ ○	OK OK	R00603FR-07 750 R00603F7500CS	- -	750R(1608)F 1/10W 750Ω F 1608	1/10W 750Ω F 1608
133	R6901, R6913, R6914, R6900	R-QHP	1/10W 510Ω F 1608 1/10W 510Ω F 1608		4	YAGEO SEMCO	R00603FR-07 510 R00603F5100CS	MQAAG071320 -	○ ○	OK OK	R00603FR-07 510 R00603F5100CS	- -	510R(1608)F 1/10W 510Ω F 1608	1/10W 510Ω F 1608
134	R6951, R6981	R-QHP	1/10W 470Ω F 1608 1/10W 470Ω F 1608	2	YAGEO SEMCO	R00603FR-07 470 R00603F4700CS	MQAAG078120 -	SMD	○ ○	OK OK	R00603FR-07 470 R00603F4700CS	- -	470R(1608)F 1/10W 470Ω F 1608	1/10W 470Ω F 1608
135	R6832, R6833, R6855, R6856	R-QHP	1/10W 100Ω F 1608 1/10W 100Ω F 1608		4	YAGEO SEMCO	R00603FR-07 100 R00603F1000CS	MQAAG063920 -	○ ○	OK OK	R00603FR-07 100 R00603F1000CS	- -	100R(1608)F 1/10W 100Ω F 1608	1/10W 100Ω F 1608
136	R6854, R6918, R6933, R6934	R-QHP	1/10W 47Ω F 1608 1/10W 47Ω F 1608	4	YAGEO SEMCO	R00603FR-07 47 R00603F4700CS	MQAAG0259630 -	SMD	○ ○	OK OK	R00603FR-07 47 R00603F4700CS	- -	47R(1608)F 1/10W 47Ω F 1608	1/10W 47Ω F 1608
137	R6994, R6995	R-QHP	1/10W 22Ω F 1608 1/10W 22Ω F 1608		2	YAGEO SEMCO	R00603FR-07 22 R00603F2200CS	MQAAG064740 -	○ ○	OK OK	R00603FR-07 22 R00603F2200CS	- -	22R(1608)F 1/10W 22Ω F 1608	1/10W 22Ω F 1608
138	R6824	R-QHP	1/10W 20Ω F 1608 1/10W 20Ω F 1608	1	YAGEO SEMCO	R00603FR-07 20 R00603F2000CS	MQAAG064950 -	SMD	○ ○	OK OK	R00603FR-07 20 R00603F2000CS	- -	20R(1608)F 1/10W 20Ω F 1608	1/10W 20Ω F 1608

139	JP9807,JP9808,JP9809,JP9810,JP9811,JP9812,JP9813,JP9817,JP9818,JP9828,JP9840,JP9842,JP9843,JP9844,JP9845	R-QHIP	1/10W 0Ω J 1608 1/10W 0Ω J 1608	15	YAGEO SEMCO	RD0603JR-07 0 RD0603J000CS	MQAAQ057010 —	SMD	○ ○	OK OK	RD0603JR-07 0 RD0603J000CS	— —	0R(1608)J 1/10W 0Ω J 1608	1/10W 0Ω J 1608
140	JP9801,JP9801,JP9802,JP9801,JP9802,JP9803,JP9801,JP9802,JP9804,JP9805,JP9806,JP9816,JP9820,JP9822,JP9824,JP9828,JP9830,JP9831,JP9833	R-QHIP	1/8W 0Ω J 2012 1/8W 0Ω J 2012	19	YAGEO SEMCO	RD0805JR-07 0 RD0805J000CS	MQAAQ000310 —	SMD	○ ○	OK OK	RD0805JR-07 0 RD0805J000CS	— —	0R(2012)J 1/8W 0Ω J 2012	1/8W 0Ω J 2012
141	JP9801,JP9802,JP9803,JP9814,JP9815,JP9819,JP9821,JP9822,JP9825,JP9826,JP9827,JP9829,JP9832,JP9833,JP9804	R-QHIP	1/4W 0Ω J 3216 1/4W 0Ω J 3216	15	YAGEO SEMCO	RC1206JR-07 0L RG3216J000CS	MQAAQ022510 MQAAQ085780	SMD	○ ○	OK OK	RC1206JR-07 0L RG3216J000CS	— —	0R(3216)J 1/4W 0Ω J 3216	1/4W 0Ω J 3216
142	JP801-JP880,JP883-JP889	OP WIRE	내선전자 트파초이이	87	CP WIRE CP WIRE SXE-0001 TAPING TYPE	CP WIRE UIMP 0.6φ CP WIRE CP WIRE SXE-0001 TAPING TYPE	MRLAA000270 MRLAA000240	Axial	— —	OK OK	— —	— —	— —	— —
143	SA801,SA802	ARRESTER	600V 600V	2	MITSUBISHI SMART ELECTRONICS	ARRESTER DSS-601M ARRESTER TSA-601M	MRSAS000620 MRSAS000680	Axial	— —	OK OK	DSS-601M TSA-601M	— —	600V 600V	600V 600V
144	PCS801S,PCS802S,POM801S	PHOTO-COUPLED	B-GRADE Voco 70V CTR130-260 (reinforced insulation)	3	LITEON RENESAS	LTV17W-BN PS2561AL1-1-V-A(IV)	MPDAF000530 MPDAF000170	Person	— —	OK OK	LTV17W-BN PS2561AL1-1-V-A(IV)	— —	LTV17W-BN CTR130-260 (reinforced insulation)	B-GRADE Voco 70V CTR130-260 (reinforced insulation)
145	BBP801	CORE FERRITE	AXIAL TYPE	1	SAMHWA	BEAD BFS2550A0L		Axial	— —	OK OK	— —	— —	BFS2550A0L	AXIAL TYPE
146	BBG803	CORE FERRITE	AXIAL TYPE AXIAL TYPE	1	SAMHWA TECSTAR	BEAD BFS3565A0L M11F RH 3.5×8.5+0.8 AS	MRA8B000510 MRA8B001320	Axial	— —	OK OK	— —	— —	BFS3565A0L	AXIAL TYPE
147	BBG801,BBG802,BBP803	CORE FERRITE	RADIAL TYPE	3	SAMHWA	BEAD BF0365 R2F (double)	MRA8D001110	Radial	— —	OK OK	— —	— —	BF0365 R2F	RADIAL TYPE
148	LX801S,LX802S	LINE FILTER	9.8mH 9.8mH 9.8mH	2	SUNGWIN ELECTRONICS	SW055429H	MRBAM024122	Person	— — —	OK OK OK	SW055429H KS055429H UN055429H	— — —	SW055429H KS055429H UN055429H	9.8mH 9.8mH 9.8mH
149	LB01S	NORMAL-CHOKE	18PHI 39μH 18PHI 39μH	1	SUNGWIN ELECTRONICS	NORMAL FILTER SW030	MQHA0013342	Person	— —	OK OK	NORMAL FILTER SW030 NORMAL FILTER KS30	— —	18PHI 39μH 18PHI 39μH	18PHI 39μH 18PHI 39μH
150	L9801S,L9802S,L9803S,L9804S	INDUCTOR-LED DRIVE	EE2020 ↗ 80μH EE2020 ↗ 80μH EE2020 ↗ 80μH	4	YAO SHENG ELECTRONICS NANYANG ELECTRONICS BOULDER ELECTRONICS	TRANS MQHA0013481 TRANS MQHA0013480 TRANS MQHA0013483	MQHA0013481 MQHA0013480 MQHA0013483	Person	— — —	OK OK OK	TRANS MQHA0013481 TRANS MQHA0013480 TRANS MQHA0013483	EE2020 EE2020 ↗ 80μH EE2020 ↗ 80μH	EE2020 EE2020 ↗ 80μH EE2020 ↗ 80μH	
151	TM801S	TRANS-DRIVE	EE1011 500μH EE1011 500μH EE1011 500μH	1	YAO SHENG ELECTRONICS NANYANG ELECTRONICS BOULDER ELECTRONICS	TRANS MQAH034581 TRANS MQAH034580 TRANS MQAH034583	MQAH034581 MQAH034580 MQAH034583	Person	— — —	OK OK OK	TRANS MQAH034581 TRANS MQAH034580 TRANS MQAH034583	EE1011 EE1011 500μH EE1011 500μH	EE1011 EE1011 500μH EE1011 500μH	
152	TS801S	TRANS-STBY	EE2515W 550μH EE2515W 550μH EE2515W 550μH	1	YAO SHENG ELECTRONICS NANYANG ELECTRONICS BOULDER ELECTRONICS	TRANS MQAH034701 TRANS MQAH034700 TRANS MQAH034703	MQAH034701 MQAH034700 MQAH034703	Person	— — —	OK OK OK	TRANS MQAH034701 TRANS MQAH034700 TRANS MQAH034703	EE2515W EE2515W 550μH EE2515W 550μH	EE2515W EE2515W 550μH EE2515W 550μH	
153	LP801S	INDUCTOR-PFC	P02813 150μH P02813 150μH P02813 150μH	1	YAO SHENG ELECTRONICS NANYANG ELECTRONICS BOULDER ELECTRONICS	PFC C01L MQHA0013321 PFC C01L MQHA0013320 PFC C01L MQHA0013323	MQHA0013321 MQHA0013320 MQHA0013323	Person	— — —	OK OK OK	PFC C01L MQHA0013321 PFC C01L MQHA0013320 PFC C01L MQHA0013323	P02813 P02813 150μH P02813 150μH	P02813 150μH P02813 150μH P02813 150μH	
154	TM802S	TRANS-MULTI	EE4117 530μH EE4117 530μH EE4117 530μH	1	YAO SHENG ELECTRONICS NANYANG ELECTRONICS BOULDER ELECTRONICS	TRANS MQAH034671 TRANS MQAH034670 TRANS MQAH034673	MQAH034671 MQAH034670 MQAH034673	Person	— — —	OK OK OK	TRANS MQAH034671 TRANS MQAH034670 TRANS MQAH034673	EE4117 EE4117 530μH EE4117 530μH	EE4117 EE4117 530μH EE4117 530μH	
155	VX801S	VARISTOR	750V 14Φ ↗-Forcing 750V 14Φ ↗-Forcing 750V 14Φ ↗-Forcing	1	WANMING AMOTECH THINKING	WMR140751K9383.5H-HK INR140751/CLBB037H TVR 140 751	MQAH007950 MQAH006170 MQAH007840	Person	— — —	OK OK OK	WMR140751K9383.5H-HK INR140751/CLBB037H TVR 140 751	WMR140751K9383.5H-HK INR140751/CLBB037H TVR 140 751	WMR140751K9383.5H-HK INR140751/CLBB037H TVR 140 751	
156	NT801S	THERMISTOR-NTC	15Φ 5Ω, 25°C ↗-OUT Forcing 15Φ 5Ω, 25°C ↗-OUT Forcing 15Φ 5Ω, 25°C ↗-OUT Forcing	1	WANMING DSC ELECTRONICS THINKING	WTR150050MK383L DSC5015MSOK SOK15056MUY005	MQIAB000450 MQIAB000460 MQIAB0004040	Person	— — —	OK OK OK	WTR150050MK383L DSC5015MSOK SOK15056MUY005	5Ω, 25°C — —	WTR150050MK383L DSC5015MSOK SOK15056MUY005	

157	FP801S	FUSE	250V 5A LEAD TYPE	1	BUSMANN	SS05-V-S-R	MRIAA008910	Person	-	OK	SS05-V-S-R	T5AH,250V	250V 5A LEAD TYPE
			250V 5A LEAD TYPE		LITTEL FUSE	215005ME 5.0A 250V	MRIAA007980		-	OK	0215005.MRETIP	-	250V 5A LEAD TYPE
			250V 5A LEAD TYPE		ORISEL	56T 250V 5A	MRIAA008240		-	OK	56T 250V 5A	-	250V 5A LEAD TYPE
158	CIL801S	INLET	2 PIN INLET, 250V 5A	1	DONGIL TECHNOLOGY	DAC-1803M	MRIJB008180	Person	-	OK	DAC-1803M	DAC-1803M	2 PIN INLET, 250V 5A
			2 PIN INLET, 250V 2.5A		PARTRON	PPP-0001-002-A1	MRIJB008190		-	OK	PPP-0001-002-A1	-	2 PIN INLET, 250V 2.5A
159	CIL803	CONNECTOR	10+2 PIN ANGLE TYPE., SIDE LOCKING	1	YEONHO ELECTRONICS	SMW200-H20S2	MRIJK023840	Person	-	OK	-	SMW200-H20S2	10+2 PIN ANGLE TYPE., SIDE LOCKING
			10+2 PIN ANGLE TYPE SIDE LOCKING		PARTRON	IN2020-L51	MRIJK023890		-	OK	-	-	10+2 PIN ANGLE TYPE SIDE LOCKING
160	CIL802A	CONNECTOR	11+2 PIN STRAIGHT TYPE., TOP LOCKING	1	YEONHO ELECTRONICS	SMW200-H2203F	MRIJK023850	Person	-	OK	-	SMW200-H2203F	11+2 PIN STRAIGHT TYPE., TOP LOCKING
			11+2 PIN STRAIGHT TYPE., TOP LOCKING		PARTRON	IN20022-L2	MRIJK024320		-	OK	-	-	11+2 PIN STRAIGHT TYPE., TOP LOCKING
161	CIL802B	CONNECTOR	9+2 PIN, STRAIGHT TYPE., TOP LOCKING	1	YEONHO ELECTRONICS	SMW200-H1803F	MRIJK023860	Person	-	OK	-	SMW200-H1803F	9+2 PIN, STRAIGHT TYPE., TOP LOCKING
			9+2 PIN, STRAIGHT TYPE., TOP LOCKING		PARTRON	IN20018-L2	MRIJK024340		-	OK	-	-	9+2 PIN, STRAIGHT TYPE., TOP LOCKING
162	CIL804	CONNECTOR	2PIN 2.0mm	1	YEONHO ELECTRONICS	SMW200-02P	MRIJK021770	Person	-	OK	-	SMW200-02P	2PIN 2.0mm
			2PIN 2.0mm		PARTRON	PWW-0013-002	MRIJK024610		-	OK	-	-	2PIN 2.0mm
163	EY11,EY12,EY13,EY14,EY15,EY16,EY17,EY18,EY23,EY24,EY25,EY26,EY35,EY36,EY44,EY45	EYELET	1.6x3.0+3.0	16	SAMSUNG JS	TERMINAL PIN EYELET SEYP-1630	MRIJA000530	Axial	-	OK	-	-	1.6x3.0+3.0
			YOOBANGWIHABOONG electricity		SAMSUNG JS	TERMINAL PIN EYELET SEYP-2030	MRIJA000560		-	OK	-	-	2.0x3.0+3.2
164	EY1,EY2,EY3,EY4,EY5,EY7,EY8,EY9,EY19,EY20,EY21,EY22,EY37,EY38,EY41,EY42,EY48,EY49,EY50,EY51	EYELET	2.0x3.0+3.2	20	SAMSUNG JS	TERMINAL PIN EYELET SEYP-2030	MRIJA000560	Axial	-	OK	-	-	2.0x3.0+3.2
			YOOBANGWIHABOONG electricity		SAMSUNG JS	TERMINAL PIN EYELET SEYP-2732	MRIJA000550		-	OK	-	-	2.7x3.2+3.2
165	EY27,EY28,EY29,EY30,EY31,EY43	EYELET	2.7x3.2+3.2	6	SAMSUNG JS	TERMINAL PIN EYELET SEYP-2732	MRIJA000550	Axial	-	OK	-	-	-
			YOOBANGWIHABOONG electricity		ELEEBER TECH	TERMINAL LUG HV32HD-90Y	M8DAE004510		-	OK	-	-	SPCC T=0.5(Sn) Ø4.521
166	LU801,LU802,LU803	LUG TERMINAL PIN	SPCC T=0.5(Sn) Ø4.521	3	YOOBANGWIHABOONG electricity	PD46810E_COY	M8DAE004510	Person	-	OK	-	-	-
			YOOBANGWIHABOONG electricity		SAMUJ ENTERPRISE	PE FOAM PD46810E_COY	MQEA000340		-	OK	-	-	제전용 560x290x2.0(T)
167		PE-FORM	제전용 560x290x2.0(T)	1					-	OK	-	-	-
									-	OK	-	-	-
168		BOX	3K SS KK DM2A(8.0t)	0.0556	신성	Master Carton PD46820_COY	MQBAA009320		-	OK	-	-	545x355x293,18kg임
									-	OK	-	-	-
169		PALLET	1100*1100*150	0.0037	NEW-GREEN	PALLET WOOD, HUMAX	MQBAC000020		-	OK	-	-	1100*1100*150
									-	OK	-	-	-
170		SOLDER WIRE		2.3355g	HEESUNG METAL	SOLDER WIRE HSE-04 0.8Ø	MFBAB001030		-	OK	-	-	-
						SOLDER WIRE SR-34 SUPER 0.8ØLMF-46 3.5%	MFBAB000940		-	OK	-	-	-
171		SOLDER WIRE	HSE-01A	0.4424g	희성소재	SOLDER WIRE 3Ø	MFBAB001020		-	OK	-	-	LEAD FREE
			LEAD FREE		HEESUNG METAL	SOLDER WIRE HSE-01 3Ø	MFBAB000950		-	OK	-	-	-
172		FLUX	specific gravity 0.825, solidity 14.16%	12.48g	태원화학	FLUX LF-715K	MFBAB000820		-	OK	-	-	specific gravity 0.825, solidity 14.16%
			KOKI KOREA		FLUX SV-PBF-304LF	MFBAB000320	-		OK	-	-		
173		CHIP BOND	DOT 방식	0.0895g	HITECH KOREA	CHIP BOND HT-1300-120	MFBAB000320		-	OK	-	-	DOT 방식
									-	OK	-	-	-
154		LABEL	ART PAPER 90g 10x4 WHITE	4	LG21별태크	LABEL SEC MODEL S/N(MOBILE)	MHAAA069000		-	OK	-	-	-
									-	OK	-	-	-
176		LABEL	POLYESTER TO_075 10x40(WHITE)	1	LG LABEL	LABEL PRINTER BARCODE	MHAAA092890		-	OK	-	-	POLYESTER TO_075 10x40(WHITE)
									-	OK	-	-	-
177		LABEL	ART PAPER 90g	0.2	LG LABEL	LABEL DC VSS SERIES Parts Specification	MHAAA093490	SMD	-	OK	-	-	ART PAPER 90g
									-	OK	-	-	-
178	SP801,SP802,SP803,SP804	PCB SUPPORTER	2.7x2.4x3.0	4	GNETEC	SUPPORTER GNE 2.7-2.4-3.0	MEAA1002280	SMD	-	OK	-	-	2.7x2.4x3.0
									-	OK	-	-	-

179	SP905	PCB SUPPORTER	PA66_13.7mm	I	시 헌택	PCB SUPPORTER PA466B20_CDY	MEA1002330	Per son	-	OK	-	-	PA66_13.7mm
									-	OK	-	-	-
180	F08 C9915,CS916,CS911,CS912,CS920S,CM915,CM919,CS917,CS918,CS931,CS932 CS901,CS908,CP911,CR913,CM908,CM909,CM912,CS909,RL901S,GP9055,GP906 S,GP905,GP906,GP907,GP908,VR9800,NT9810	RTV	HII TE	3.36g	DOW CORNING	RTV_EA4100	MFA9000940		-	OK	-	-	HII TE
			OKONG		RTV_H-829W	MFA9000940	-		OK	-	-	-	



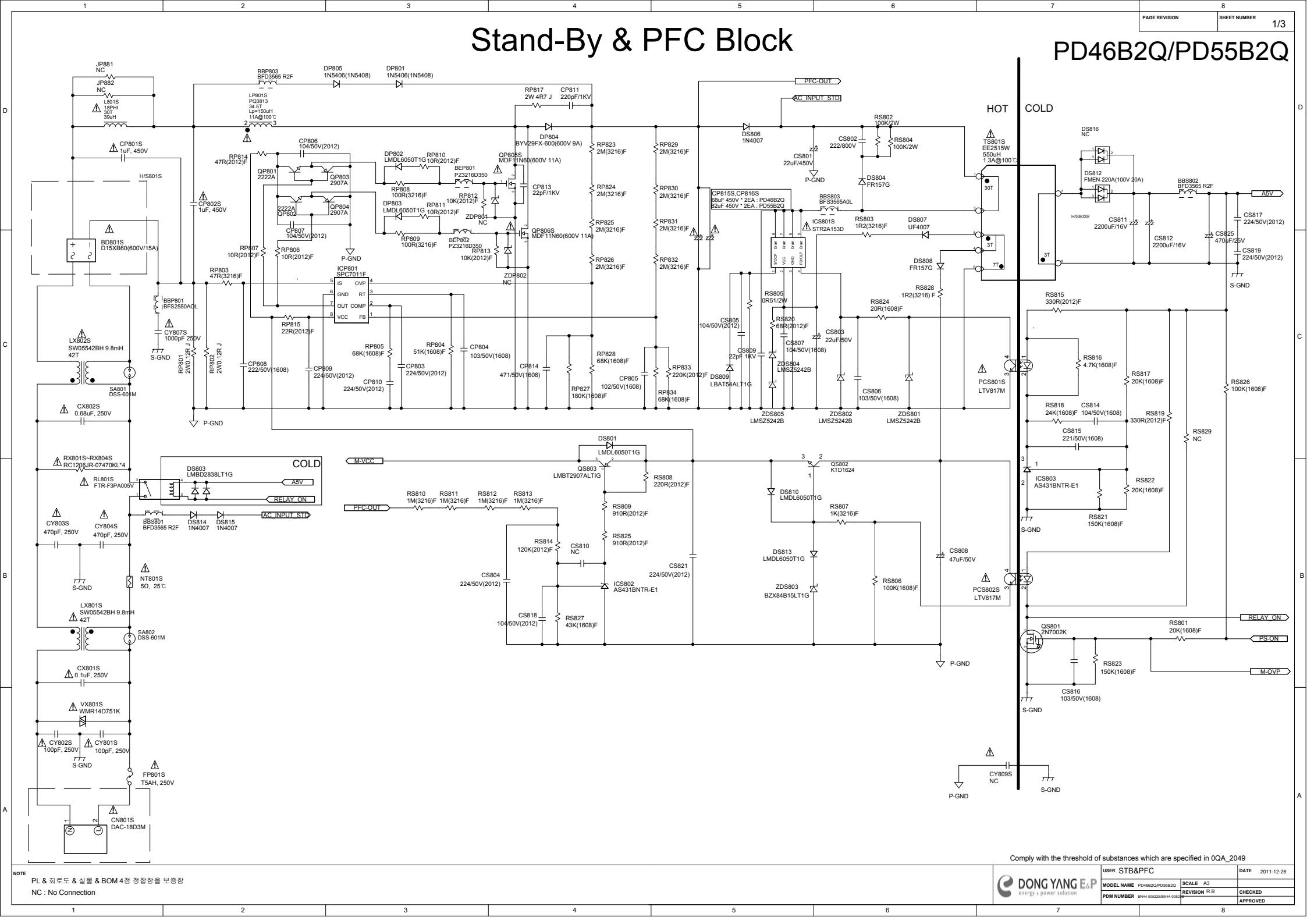
SPECIFICATION
PD46B2Q_CDY
(CIRCUIT DRAWING)

STD RECORD NO.
BN44-00522B
PAGE PUB. DATE
2011.12.13
PAGE REV. DATE
2012.01.13

4. CIRCUIT DRAWING

Stand-By & PFC Block

PD46B2Q/PD55B2Q



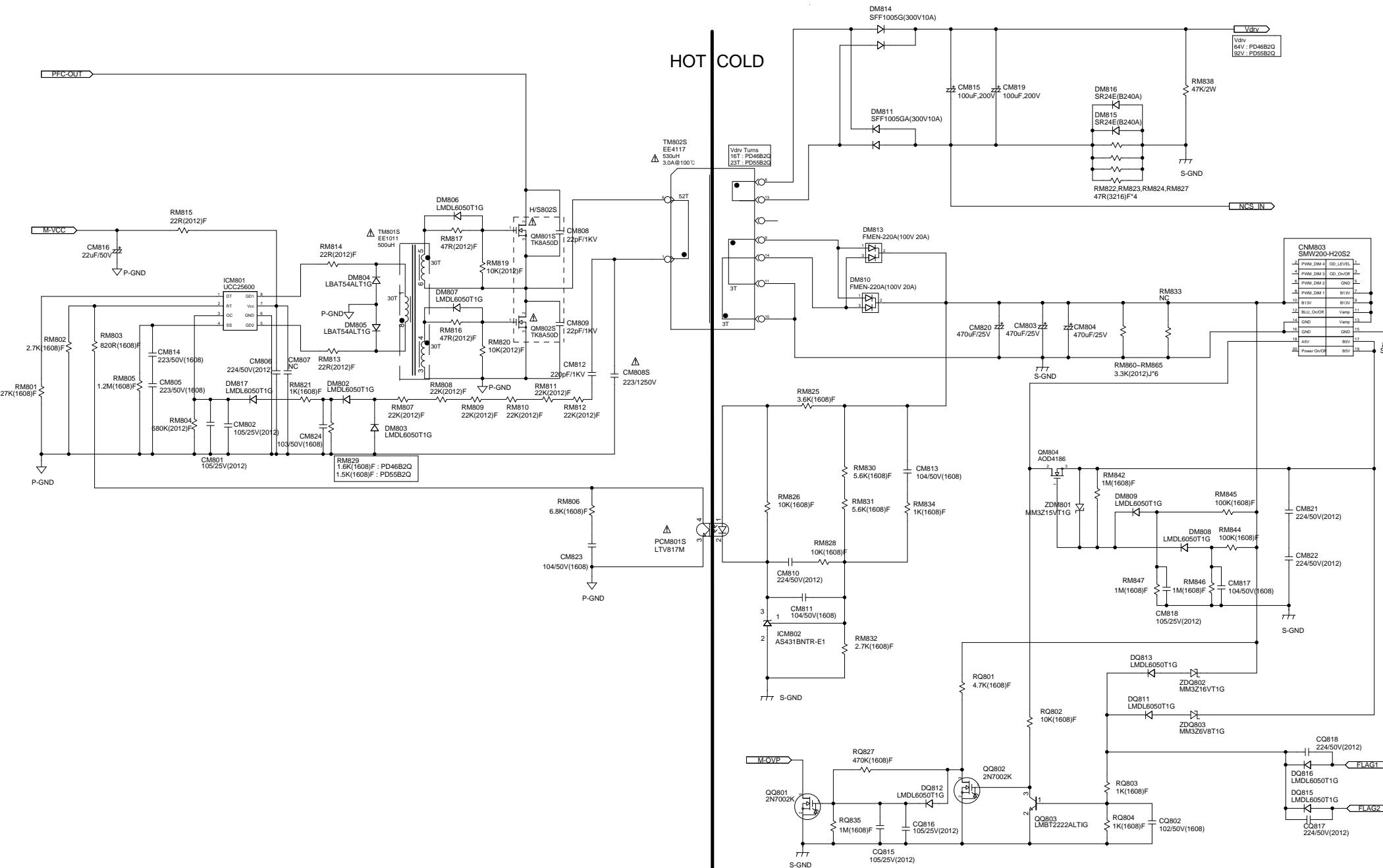
Comply with the threshold of substances which are specified in QQA_2049

NOTE
PL & 회로도 & 설문 & BOM 4점 정합성을 보증함
NC : No Connection

USER	STB&PFC	DATE
DONG YANG E.P	PD46B2Q/PD55B2Q	A3
MODEL NAME	PD46B2Q/PD55B2Q	SCALE
PDM NUMBER	BH4-00522/BH4-00522	REVISION R.B
		CHECKED
		APPROVED

MULTI Block

PD46B2Q/PD55B2Q



Comply with the threshold of substances which are specified in OQA 204

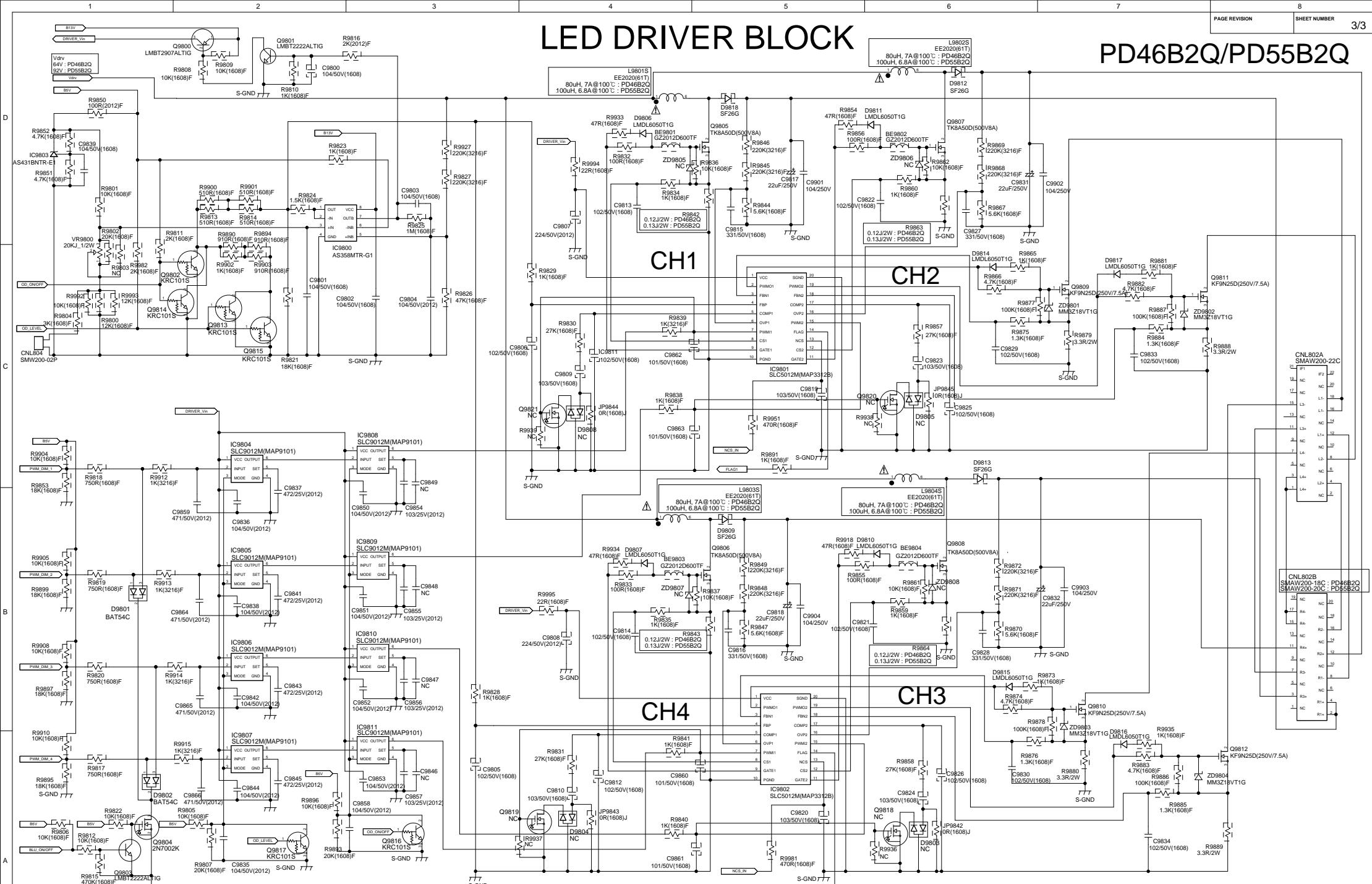
NOTE PL & 회로도 & 실물 & BOM 4점 정합함을 보증함

NC : No Connection

	USER MULTI	DATE 2011-12-26
MODEL NAME	PD48B2Q/PD55B2Q	SCALE A3
PDM NUMBER	BN44-0552B/BN44-0552C	REVISION R.B CHECKED APPROVED

LED DRIVER BLOCK

PD46B2Q/PD55B2Q



Comply with the threshold of substances which are specified in OQA-2019

NOTE PL & 회로도 & 실물 & BOM 4점 정합함을 보증함

NC : No Connection

USER LED_DRIVE		DATE 2011-12-26
MODEL NAME	PD46B2Q/PD56B2Q	SCALE A3
PDM NUMBER	BN44-025229/BN44-025226	REVISION R.B CHECKED APPROVED

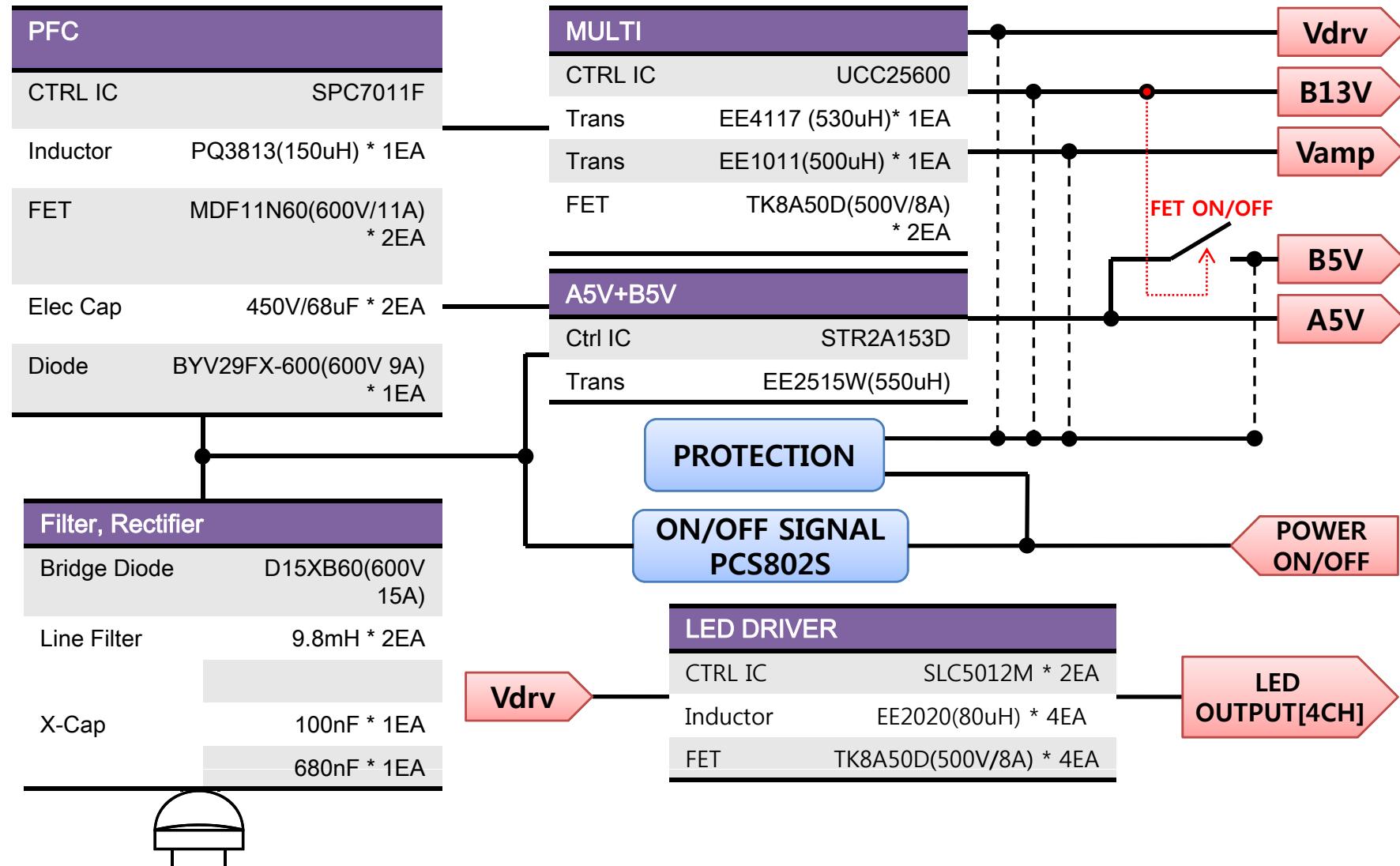


SPECIFICATION
PD46B2Q_CDY
(BLOCK DIAGRAM PART)

STD RECORD NO.
BN44-00522B
PAGE PUB. DATE
2011.12.13
PAGE REV. DATE
2012.01.13

5. BLOCK DIAGRAM PART

BLOCK DIAGRAM





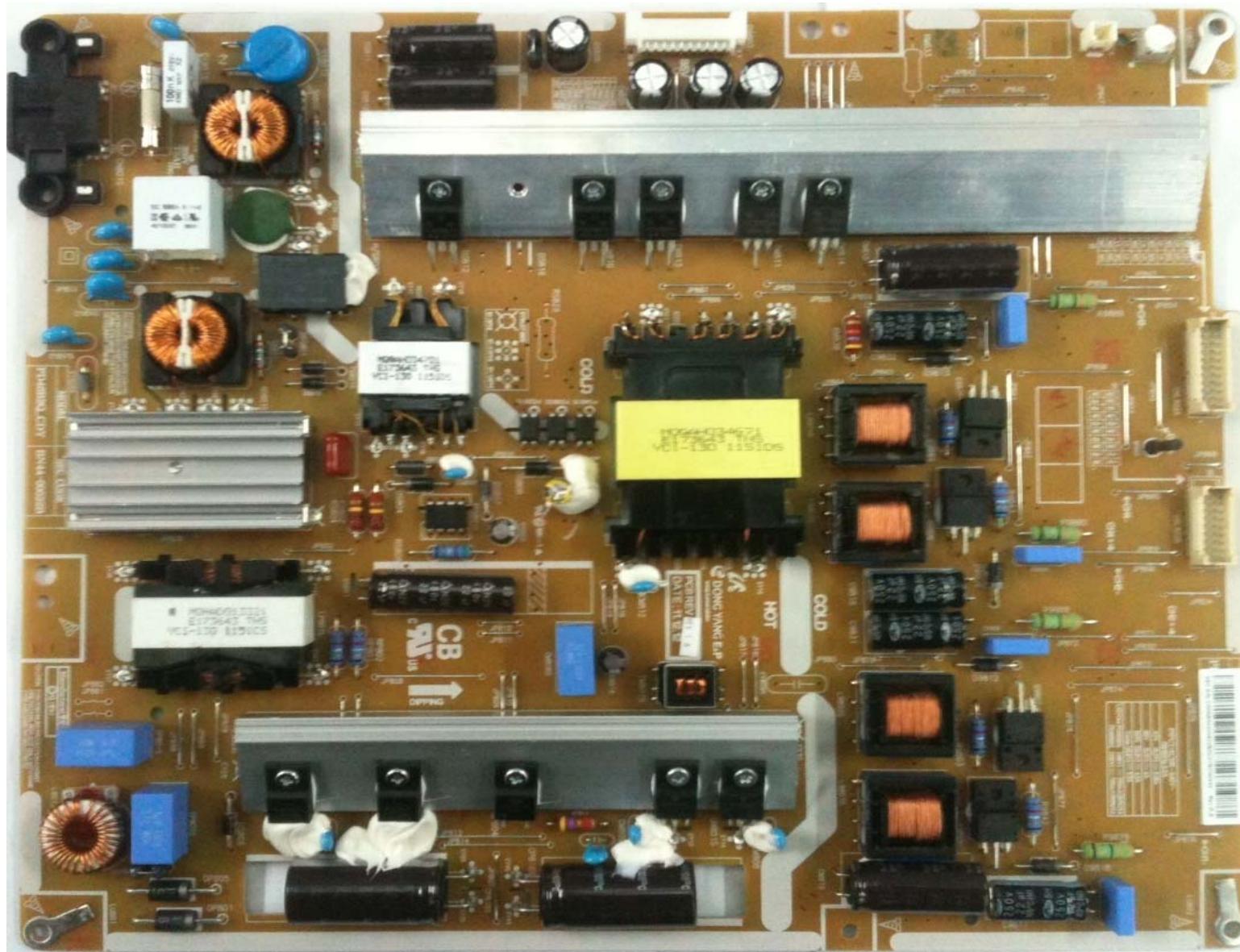
SPECIFICATION
PD46B2Q_CDY
(BOARD PHOTOGRAPHY)

STD RECORD NO.
BN44-00522B
PAGE PUB. DATE
2011.12.13
PAGE REV. DATE
2012.01.13

6. BOARD PHOTOGRAPHY

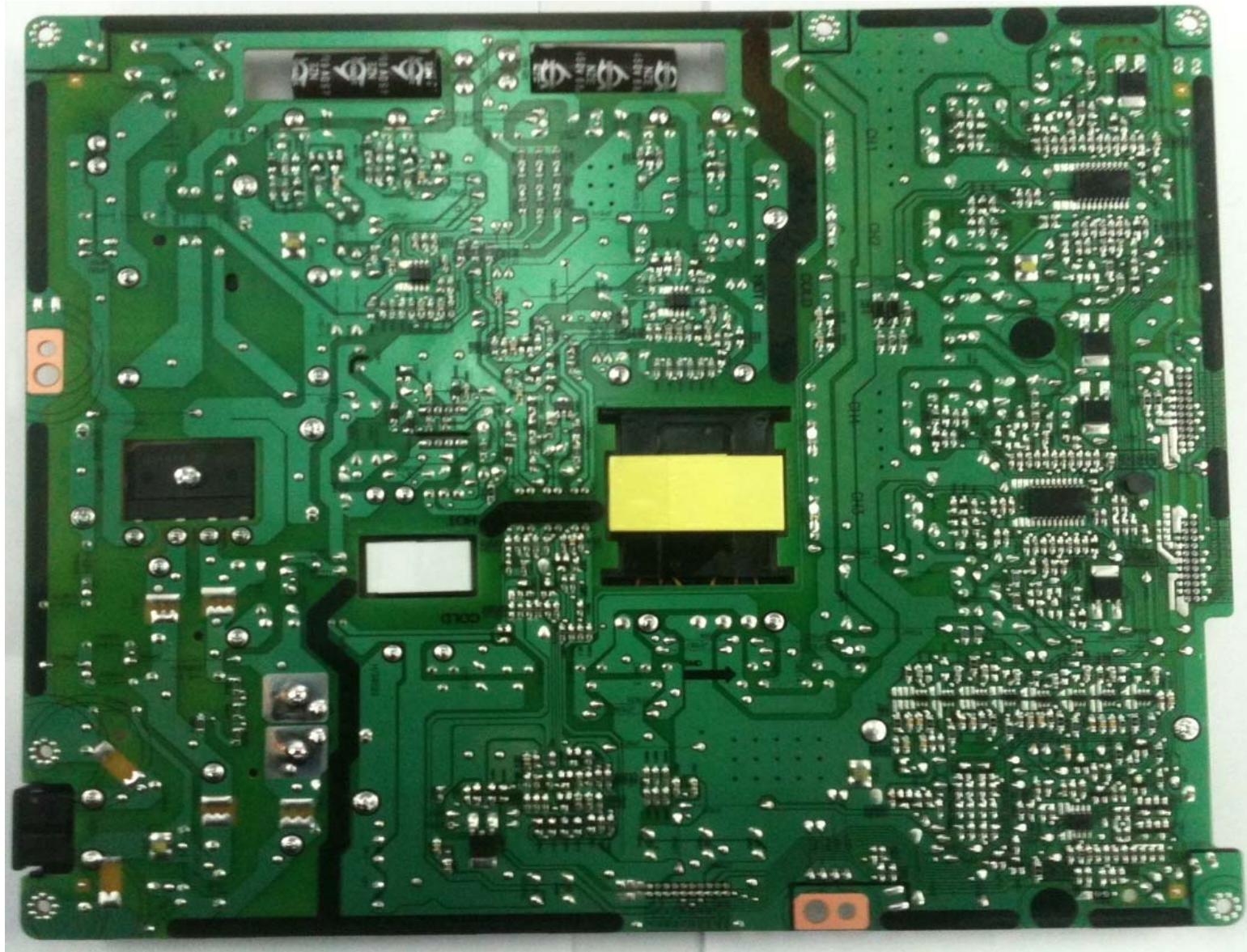
■ DC Voltage Stabilized Supply TOP VIEW

" PL & 회로도 & 실물 & BOM 4점 정합함을 보증함"



■ DC Voltage Stabilized Supply BOTTOM VIEW

" PL & 회로도 & 실물 & BOM 4점 정합함을 보증함"

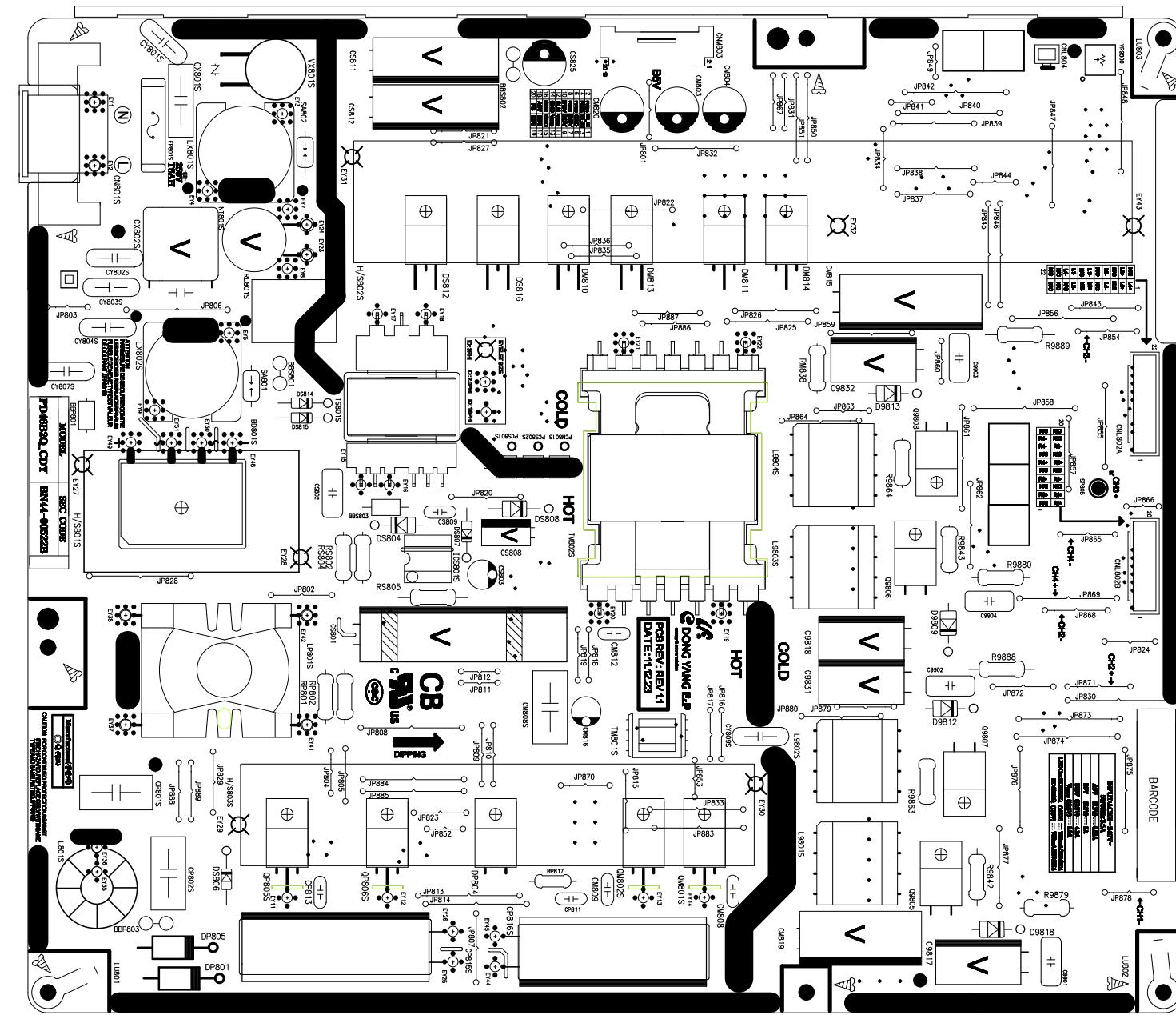




	SPECIFICATION PD46B2Q_CDY (PCB DRAWING PART DIAGRAM)	STD RECORD NO. PAGE PUB. DATE PAGE REV. DATE	BN44-00522B 2011.12.13 2012.01.13
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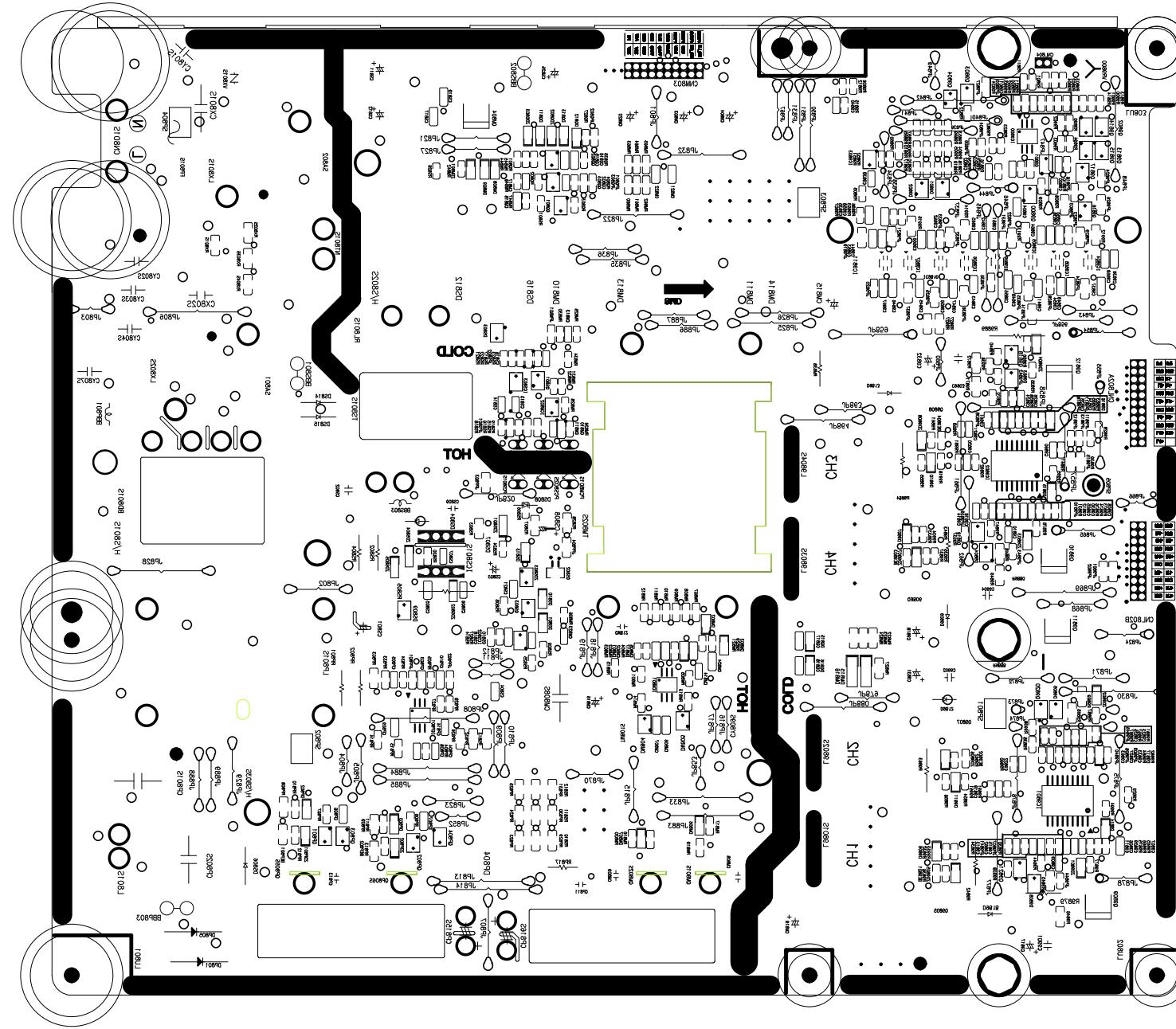
7. PCB DRAWING PART DIAGRAM

Comply with the threshold of substances which are specified in OQA_2049



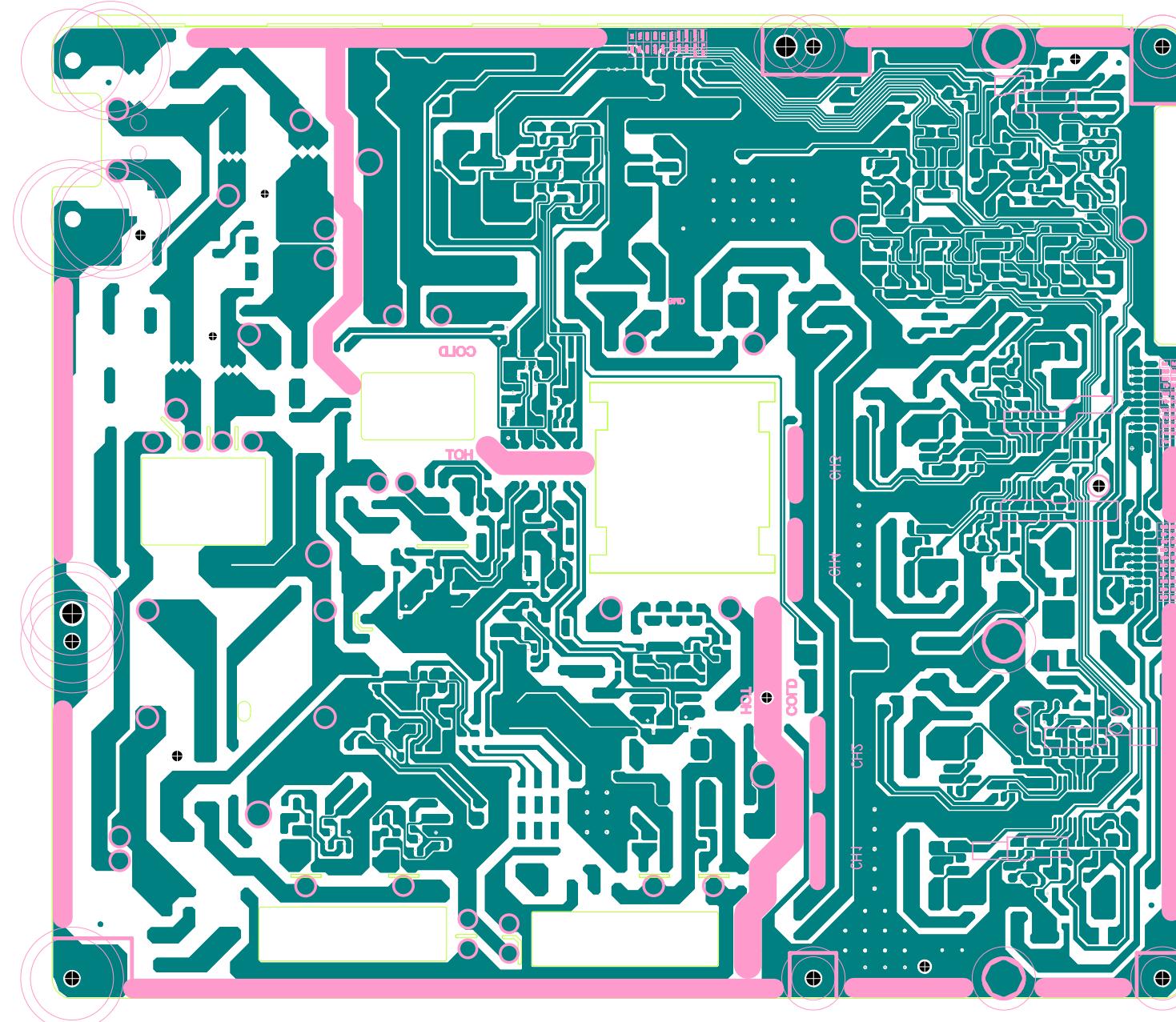
BOTTOM SILK

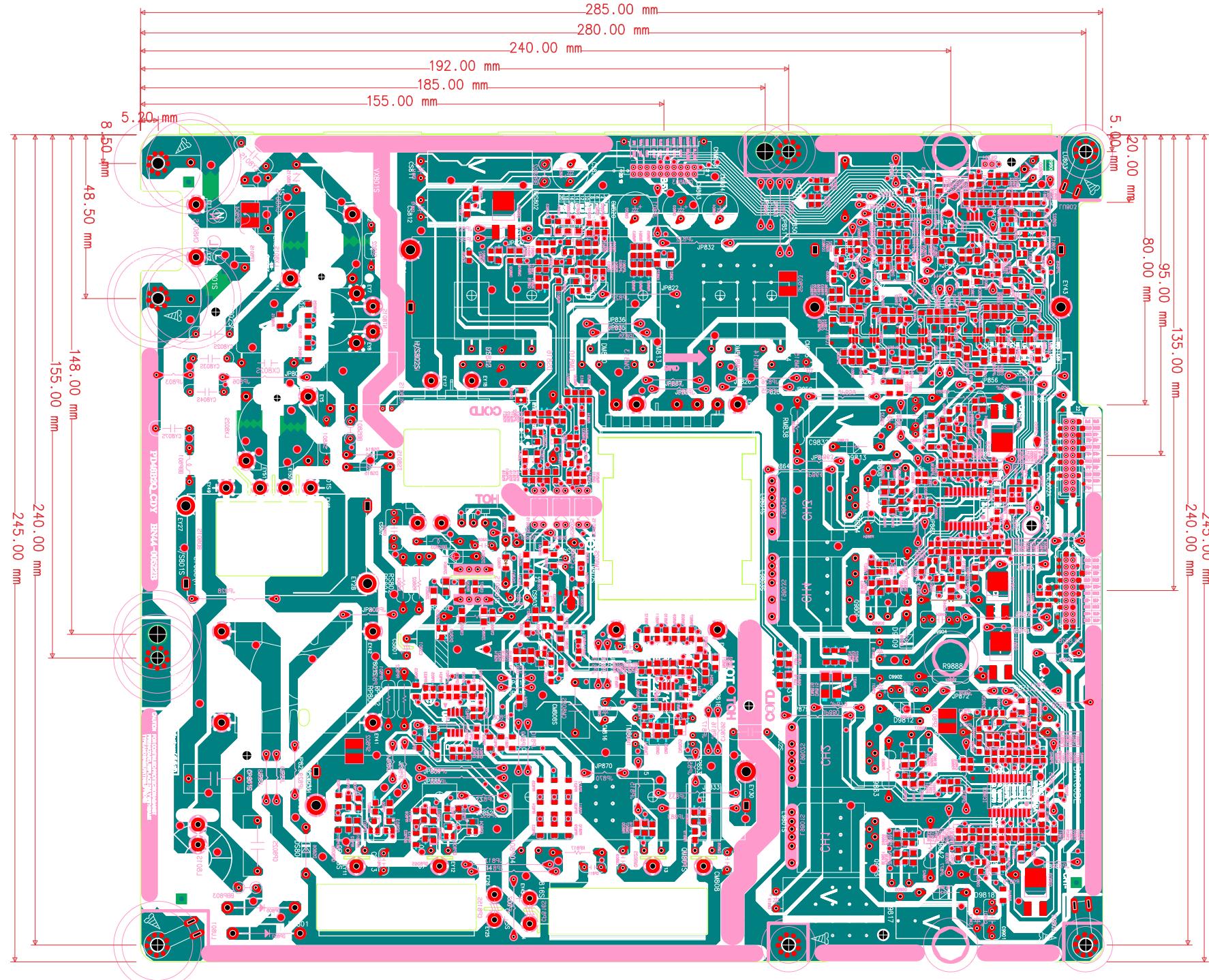
Comply with the threshold of substances which are specified in OQA_2049



PATTERN

Comply with the threshold of substances which are specified in QQA_2049







SPECIFICATION
PD46B2Q_CDY
(TEST RESULT)

STD RECORD NO.
PAGE PUB. DATE
PAGE REV. DATE

BN44-00522B
2011.12.13
2012.01.13

8. TEST RESULT

■ 반단락 Test

1. 시험 목적 : PBA의 부품 발화 및 과열로 인한 연소발생시 제품 외부로 확산 방지구조 검토

2. Test Condition

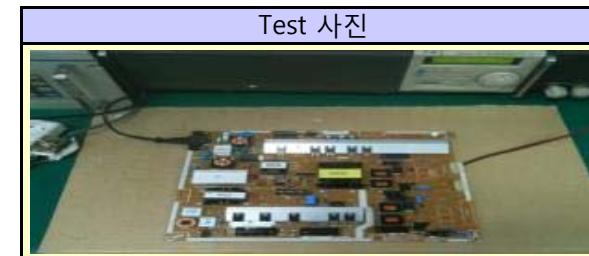
- Fuse가 5分 이상 융단되지 않는 부하 조건에서 방치 시 화재 발생 여부를 확인
이 때 화재에 가장 취약한 부품인 Line Filter의 온도를 측정함.
- TEST LOAD CONDITION
Bulk cap 양단에 전자 Load등의 부하를 연결 후 Fuse 정격의 90%, 100%, 110%, 120%, 135% 전류 인가

3. 판정 기준

- Cheese cloth 또는 Tissue Paper에 발화가 발생시 NG
- PCB & Soldering 210°C 초과 금지
- Fusible 저항은 10se 이내 단락될 것
- 부품의 이탈 및 절연파괴가 없을 것

4. 평가 결과 : 평가 결과 작성

인가 전류	가중치	Line Filter 온도		결과
		LE801S	LE802S	
4.5 A	90%	160 °C	152 °C	LINE FILTER 발화 없음, FUSE 이상無
5.0 A	100%	171 °C	168 °C	LINE FILTER 발화 없음, FUSE 이상無
5.5 A	110%	187 °C	175 °C	LINE FILTER 발화 없음, FUSE 이상無
6.0 A	120%	198 °C	190 °C	LINE FILTER 발화 없음, FUSE 이상無
6.75 A	135%	204 °C	198 °C	LINE FILTER 발화 없음, FUSE 이상無



■ Bulk Cap 방폭 시험

1. 시험 내용

- 정격 입력 전압 AC 100V/240V 의 100% (264Vac) 부터 30분 단위로 10% 씩 상승시키며 522.7Vac (정격의 198%) 까지 DC Voltage Stabilized Supply의 파고점 확인 및 PL 저촉 사항 확인

2. Test Load Condition

- 입력 사양 : AC 264V / 60Hz 에서 10% 씩 30분 단위로 전압 상승시키며 현상 관찰
- 출력 사양 : Typical Load 조건

3. 판정 기준

- Bulk Cap 방폭時 정상 방폭할 것
- PL성 불량 발생 없을 것

4. 평가 결과 : 입력 464.08 Vac (176%) 에서 Bulk Cap 방폭됨



■ Fuse 적합성 검토

1. 시험 목적 : 제품에 사용되는 Fuse 의 적합성을 검토하여 오사용으로 인한 PL을 사전에 방지코져 함

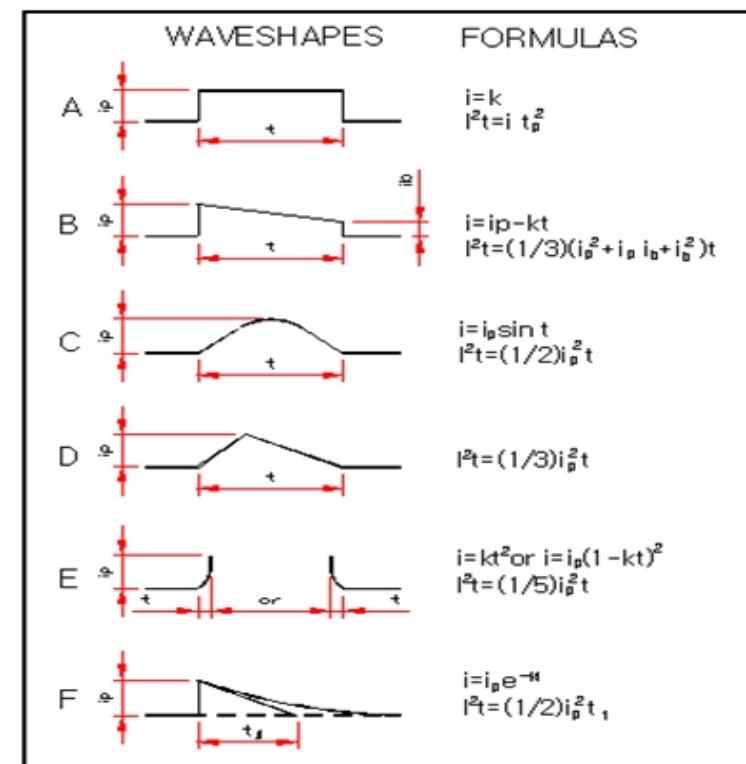
- Fuse Spec 오설정에 따른 회로 Short시 Fuse 단락 시간이 늦어져 화재 및 소손 발생 방지
- Fuse 의 Spec 설정을 Margin 없이 설계하여 잡은 단락으로 인한 시장 불량 발생 방지

2. 검토 방법

- Minimum Rating = 최대동작전류 / (인증기관 Factor * 온도 Factor)
 - . 최대 동작 전류 : Typical Load 시 Normal Current
 - . 인증 기관 Factor : 0.75
 - . 온도 Factor : 60°C 조건
- 과도 Stress = 과도전류 / Fuse 과도 spec
 - . 과도 전류시 우측 표를 이용하여 I^2t 계산

3. 판정 기준

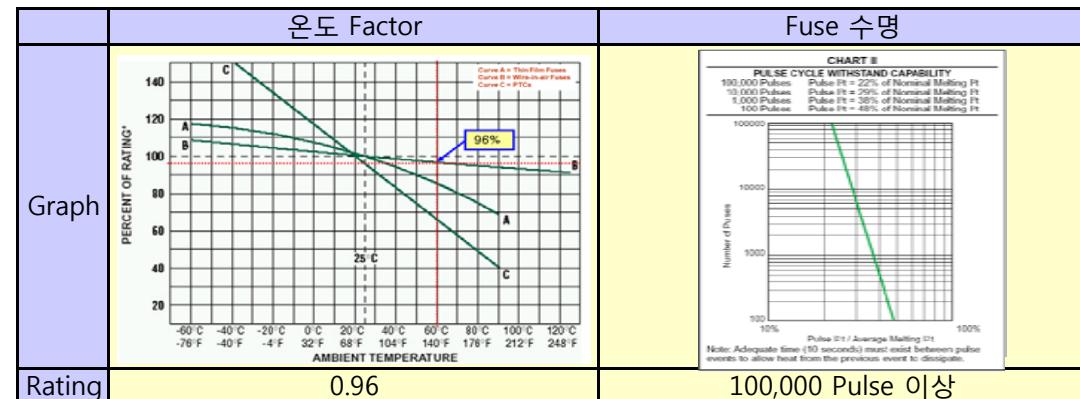
- Fuse 용량 > Minimum Rating
- 과도 Stress < Fuse 수명 Rating Factor



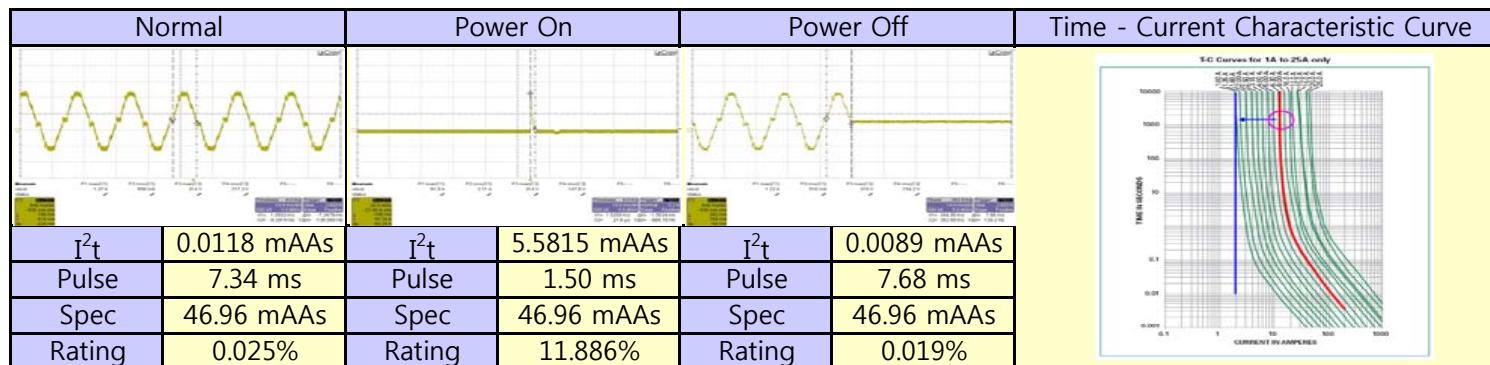
■ Fuse 적합성 검토 결과 - FP801S

1. Fuse 선정 결과

Fuse 용량	5.00 A
인증기관 Factor	0.75
온도 Factor	0.96
F.L.A (Full Load Ampere)	2.03 A
Minimum Rating	2.82 A
과도 전류	2.79075
Fuse 과도 Spec	46.96
과도 Stress	5.94%
Fuse 수명	100,000 Pulse
Result	OK



2. Test Data



■ ALT 시험 Data

1. 시험 목적 : 이 시험의 목적은 제품 출하 후 Life Cycle 동안 Stress로 인하여 발생하는 고장을 사전에 도출하여 개선함.

2. ALT 결과

▶ TEST RESULT : PASS (목표 시간 및 불량율 ZERO화 달성)

▶ TEST PLAN

- 1) 시험기간 : 2011년 09월 16일 ~ 2011년 10월 28일
- 2) 시험시간 : 500hr

3) 시료 수 : 50개

4) 시험조건 : 정격전압(220V) / TYPICAL LOAD / CHAMBER TEMPERATURE(70°C) / ON : 9분 ↔ OFF : 1분(25EA) / Normal Mode(25EA)

	First Vendor	Second Vendor
Edge 상한치(10개)	109160001 ~ 109160005	109160026 ~ 109160030
Edge 하한치(10개)	109160006 ~ 109160010	109160031 ~ 109160035
Normal(30개)	109160011 ~ 109160025	109160036 ~ 109160050

▶ 판정 기준

: 1,000시간 혹은 500시간을 기준으로 불량율 Zero를 달성하여야 하고, 불량이 1개라도 발생할 경우,

개선 후 처음부터 재시험을 실시함.

단) 시험 시간의 연장이 불가한 경우 고장의 심각도 및 개선 대책을 검토하여 관련부서의 협의를 거친 후 최종 결정 한다.

(고객사 기준)

[ALT TEST 일일 CHECK SHEET]

시험명	ALT TEST	시험담당	DD. 품질보증팀 여동기D
MODEL 명	PD46B2Q	시험시간	'11.09.16 ~ '11.10.28
개발담당	연구3실 박노성C	시료수	50EA

시험일	MODEL	일일 CHECK TIME	증상 CHECK	판정	시험담당
'11.09.16	PD46B2Q	11:00 / 19:00	이상무	PASS	여동기
'11.09.17	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.09.18	PD46B2Q	-	-	-	-
'11.09.19	PD46B2Q	-	-	-	-
'11.09.20	PD46B2Q	14:00 / 19:00	이상무	PASS	여동기
'11.09.21	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.09.22	PD46B2Q	09:00 / 18:30	이상무	PASS	여동기
'11.09.23	PD46B2Q	09:00 / 17:00	이상무	PASS	여동기
'11.09.24	PD46B2Q	09:00 / 16:00	이상무	PASS	여동기
'11.09.25	PD46B2Q	-	-	-	-
'11.09.26	PD46B2Q	-	-	-	-
'11.09.27	PD46B2Q	09:30 / 17:00	이상무	PASS	여동기
'11.09.28	PD46B2Q	09:00 / 19:30	이상무	PASS	여동기
'11.09.29	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.09.30	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.01	PD46B2Q	09:00 / 15:30	이상무	PASS	여동기
'11.10.02	PD46B2Q	-	-	-	-
'11.10.03	PD46B2Q	-	-	-	-
'11.10.04	PD46B2Q	-	-	-	-
'11.10.05	PD46B2Q	09:00 / 19:30	이상무	PASS	여동기
'11.10.06	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.07	PD46B2Q	09:00 / 15:30	이상무	PASS	여동기
'11.10.08	PD46B2Q	14:00 / 19:00	이상무	PASS	여동기
'11.10.09	PD46B2Q	-	-	-	-
'11.10.10	PD46B2Q	-	-	-	-
'11.10.11	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.12	PD46B2Q	14:00 / 19:00	이상무	PASS	여동기
'11.10.13	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.14	PD46B2Q	09:00 / 18:30	이상무	PASS	여동기
'11.10.15	PD46B2Q	09:00 / 17:00	이상무	PASS	여동기
'11.10.16	PD46B2Q	-	-	-	-
'11.10.17	PD46B2Q	-	-	-	-
'11.10.18	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.19	PD46B2Q	09:30 / 17:00	이상무	PASS	여동기
'11.10.20	PD46B2Q	09:00 / 19:30	이상무	PASS	여동기
'11.10.21	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.22	PD46B2Q	09:00 / 18:00	이상무	PASS	여동기
'11.10.23	PD46B2Q	-	-	-	-
'11.10.24	PD46B2Q	-	-	-	-
'11.10.25	PD46B2Q	09:00 / 19:30	이상무	PASS	여동기
'11.10.26	PD46B2Q	09:00 / 18:40	이상무	PASS	여동기
'11.10.27	PD46B2Q	09:00 / 19:30	이상무	PASS	여동기
'11.10.28	PD46B2Q	09:00 / 14:00	이상무	PASS	여동기
TOTAL		1000HR	이상무	PASS	여동기

■ ALT TEST # OUTPUT VOLTAGE DATA

1) MODEL 번호 : P046920
 2) 시험 일자 : '11.09.16
 3) 시험 대상 : 100V~240V
 4) 제작 번호 : MIN TYP MAX
 5) 시험 항목 : 품질보증원 이동기

SPC	90V MIN				90V TYP				90V MAX				110V MIN				110V TYP				110V MAX			
	ASV	B5V	12.8V	Vamp	ASV	B5V	12.8V	Vamp	ASV	B5V	12.8V	Vamp	ASV	B5V	12.8V	Vamp	ASV	B5V	12.8V	Vamp	ASV	B5V	12.8V	Vamp
001/PAT VOLTAGE	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88
No	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V
10915001	5.35	5.35	12.88	12.91	5.27	5.25	12.80	12.80	5.25	5.15	12.75	12.76	5.24	5.34	12.92	12.88	5.29	5.25	12.82	12.86	5.22	5.18	12.77	
10915002	5.35	5.35	12.87	12.88	5.27	5.22	12.84	12.83	5.24	5.18	12.76	12.75	5.27	5.34	12.90	12.89	5.30	5.23	12.83	12.85	5.24	5.18	12.74	
10915003	5.35	5.33	12.90	12.90	5.30	5.22	12.81	12.84	5.23	5.16	12.75	12.77	5.26	5.35	12.89	12.91	5.30	5.24	12.81	12.81	5.24	5.16	12.74	
10915004	5.36	5.34	12.89	12.91	5.28	5.24	12.81	12.82	5.22	5.16	12.76	12.75	5.25	5.34	12.89	12.91	5.28	5.24	12.85	12.84	5.23	5.16	12.75	
10915005	5.32	5.35	12.91	12.92	5.30	5.26	12.85	12.86	5.21	5.18	12.76	12.77	5.25	5.32	12.87	12.91	5.30	5.25	12.80	12.80	5.22	5.17	12.75	
10915006	5.34	5.33	12.87	12.89	5.28	5.25	12.85	12.82	5.24	5.19	12.74	12.76	5.25	5.33	12.93	12.90	5.29	5.26	12.85	12.83	5.22	5.18	12.76	
10915007	5.33	5.32	12.89	12.92	5.30	5.23	12.84	12.81	5.23	5.17	12.76	12.77	5.26	5.34	12.88	12.91	5.30	5.24	12.82	12.83	5.23	5.18	12.75	
10915008	5.35	5.33	12.92	12.93	5.30	5.23	12.83	12.84	5.22	5.16	12.76	12.75	5.24	5.33	12.92	12.93	5.28	5.23	12.83	12.80	5.22	5.16	12.76	
10915009	5.33	5.35	12.90	12.92	5.27	5.24	12.84	12.80	5.24	5.16	12.76	12.74	5.26	5.32	12.88	12.89	5.28	5.25	12.82	12.80	5.25	5.18	12.75	
10915010	5.35	5.35	12.90	12.92	5.28	5.23	12.84	12.82	5.24	5.18	12.76	12.77	5.25	5.36	12.92	12.91	5.28	5.22	12.80	12.85	5.23	5.17	12.74	
10915011	5.35	5.35	12.92	12.88	5.29	5.24	12.83	12.82	5.25	5.18	12.74	12.75	5.26	5.33	12.88	12.88	5.28	5.23	12.85	12.83	5.25	5.18	12.77	
10915012	5.32	5.35	12.90	12.93	5.29	5.23	12.81	12.82	5.24	5.18	12.76	12.74	5.26	5.34	12.90	12.91	5.30	5.25	12.83	12.84	5.22	5.17	12.75	
10915013	5.34	5.35	12.88	12.88	5.28	5.22	12.85	12.80	5.24	5.15	12.75	12.76	5.26	5.34	12.91	12.82	5.28	5.26	12.83	12.82	5.24	5.18	12.76	
10915014	5.33	5.34	12.92	12.92	5.30	5.23	12.81	12.83	5.24	5.17	12.77	12.76	5.27	5.32	12.91	12.88	5.29	5.24	12.81	12.81	5.22	5.17	12.76	
10915015	5.34	5.32	12.91	12.89	5.29	5.24	12.82	12.86	5.25	5.19	12.75	12.75	5.27	5.33	12.91	12.91	5.30	5.25	12.82	12.82	5.21	5.16	12.77	
10915016	5.35	5.36	12.89	12.87	5.28	5.25	12.85	12.80	5.24	5.16	12.77	12.76	5.26	5.35	12.89	12.88	5.29	5.25	12.82	12.82	5.24	5.17	12.75	
10915017	5.33	5.35	12.90	12.91	5.30	5.25	12.85	12.83	5.23	5.15	12.74	12.76	5.25	5.35	12.88	12.88	5.28	5.23	12.81	12.82	5.23	5.17	12.75	
10915018	5.34	5.33	12.88	12.91	5.28	5.22	12.83	12.84	5.23	5.16	12.76	12.76	5.26	5.36	12.91	12.89	5.30	5.23	12.81	12.84	5.24	5.18	12.74	
10915019	5.32	5.35	12.89	12.88	5.28	5.23	12.80	12.80	5.25	5.17	12.76	12.75	5.27	5.33	12.89	12.91	5.31	5.23	12.86	12.85	5.23	5.17	12.75	
10915020	5.34	5.35	12.92	12.91	5.31	5.26	12.86	12.83	5.23	5.17	12.76	12.75	5.27	5.33	12.87	12.92	5.27	5.25	12.82	12.83	5.24	5.15	12.75	
10915021	5.35	5.34	12.90	12.93	5.28	5.25	12.82	12.83	5.24	5.17	12.75	12.77	5.26	5.32	12.90	12.89	5.27	5.24	12.82	12.85	5.22	5.18	12.76	
10915022	5.35	5.34	12.92	12.90	5.29	5.24	12.83	12.83	5.23	5.16	12.75	12.76	5.26	5.35	12.90	12.92	5.31	5.22	12.81	12.81	5.25	5.19	12.75	
10915023	5.32	5.33	12.88	12.91	5.29	5.26	12.84	12.85	5.23	5.15	12.74	12.74	5.26	5.33	12.89	12.93	5.28	5.25	12.86	12.81	5.24	5.18	12.74	
10915024	5.34	5.32	12.90	12.87	5.29	5.22	12.82	12.83	5.21	5.15	12.76	12.75	5.27	5.33	12.88	12.88	5.30	5.25	12.81	12.85	5.22	5.19	12.75	
10915025	5.36	5.34	12.89	12.92	5.29	5.24	12.84	12.86	5.21	5.19	12.75	12.76	5.25	5.33	12.87	12.91	5.29	5.23	12.86	12.84	5.23	5.19	12.75	
10915026	5.33	5.34	12.90	12.88	5.31	5.23	12.84	12.85	5.21	5.15	12.76	12.77	5.27	5.33	12.91	12.89	5.27	5.24	12.82	12.85	5.22	5.18	12.76	
10915027	5.36	5.33	12.88	12.88	5.30	5.22	12.86	12.86	5.23	5.16	12.77	12.75	5.26	5.34	12.89	12.91	5.29	5.24	12.83	12.84	5.24	5.16	12.76	
10915028	5.34	5.34	12.91	12.87	5.29	5.23	12.82	12.82	5.25	5.17	12.74	12.76	5.24	5.34	12.91	12.91	5.31	5.24	12.83	12.83	5.21	5.19	12.74	
10915029	5.35	5.36	12.88	12.89	5.31	5.22	12.81	12.84	5.22	5.18	12.77	12.74	5.25	5.33	12.88	12.90	5.30	5.23	12.86	12.80	5.24	5.17	12.77	
10915030	5.35	5.34	12.90	12.89	5.31	5.24	12.81	12.85	5.25	5.16	12.75	12.75	5.27	5.35	12.89	12.87	5.31	5.23	12.83	12.84	5.21	5.16	12.75	
10915031	5.34	5.33	12.91	12.92	5.30	5.23	12.81	12.86	5.24	5.18	12.75	12.75	5.25	5.34	12.89	12.91	5.29	5.25	12.83	12.85	5.25	5.18	12.75	
10915032	5.32	5.35	12.89	12.89	5.28	5.23	12.83	12.83	5.23	5.18	12.77	12.77	5.26	5.32	12.89	12.93	5.31	5.26	12.82	12.83	5.21	5.19	12.74	
10915033	5.35	5.35	12.90	12.91	5.29	5.22	12.86	12.86	5.22	5.17	12.76	12.76	5.25	5.34	12.91	12.90	5.29	5.26	12.82	12.84	5.25	5.18	12.75	
10915034	5.34	5.36	12.89	12.92	5.29	5.25	12.83	12.86	5.22	5.17	12.76	12.75	5.25	5.34	12.88	12.93	5.30	5.26	12.82	12.84	5.22	5.16	12.76	
10915035	5.34	5.34	12.88	12.91	5.27	5.23	12.81	12.85	5.21	5.17	12.77	12.76	5.24	5.34	12.89	12.93	5.30	5.26	12.81	12.84	5.21	5.16	12.75	
10915036	5.33	5.34	12.90	12.90	5.28	5.26	12.83	12.83	5.25	5.17	12.75	12.76	5.26	5.35	12.88	12.91	5.31	5.26	12.82	12.85	5.23	5.16	12.77	
10915037	5.33	5.32	12.90	12.92	5.29	5.25	12.81	12.82	5.24	5.17	12.77	12.75	5.26	5.33	12.91	12.90	5.29	5.23	12.81	12.83	5.22	5.19	12.75	
10915038	5.35	5.33	12.90	12.89	5.30	5.23	12.86	12.82	5.22	5.18	12.75	12.77	5.27	5.34	12.88	12.90	5.29	5.25	12.83	12.83	5.22	5.16	12.76	
10915039	5.34	5.36	12.89	12.92	5.28	5.25	12.83	12.82	5.21	5.18	12.76	12.74	5.26	5.34	12.89	12.90	5.28	5.25	12.83	12.85	5.21	5.19	12.76	
10915040	5.34	5.34	12.87	12.92	5.28	5.25	12.83	12.82	5.21	5.18	12.76	12.74	5.26	5.34	12.89	12.93	5.30	5.26	12.81	12.84	5.21	5.16	12.75	
10915041	5.34</td																							

S/N	220V MIN				220V TYP				220V MAX				254V MIN				254V TYP				254V MAX				
	A5V	B5V	12.8V	Vamp																					
출력 사양																									
OUTPUT VOLTAGE	5.04V	5.04	11.88	11.88																					
No	5.3V	5.3V	12.8V	12.8V																					
10915001	5.34	5.33	12.89	12.88	5.30	5.24	12.83	12.82	5.22	5.19	12.76	12.76	5.24	5.33	12.88	12.88	5.27	5.27	12.83	12.83	5.24	5.24	12.76	12.76	
10915002	5.35	5.33	12.88	12.89	5.28	5.23	12.82	12.85	5.24	5.17	12.74	12.75	5.26	5.35	12.88	12.89	5.30	5.24	12.80	12.82	5.22	5.18	12.76	12.76	
10915003	5.36	5.35	12.90	12.92	5.30	5.23	12.84	12.85	5.24	5.16	12.76	12.76	5.25	5.33	12.88	12.88	5.27	5.26	12.83	12.85	5.22	5.15	12.74	12.74	
10915004	5.34	5.35	12.89	12.92	5.27	5.23	12.83	12.83	5.24	5.17	12.74	12.74	5.27	5.35	12.90	12.90	5.30	5.25	12.84	12.81	5.23	5.16	12.77	12.77	
10915005	5.35	5.32	12.89	12.90	5.27	5.26	12.85	12.83	5.22	5.18	12.76	12.74	5.25	5.33	12.88	12.89	5.31	5.23	12.84	12.83	5.21	5.18	12.74	12.74	
10915006	5.33	5.33	12.92	12.87	5.30	5.23	12.82	12.83	5.22	5.19	12.75	12.75	5.36	5.36	12.90	12.92	5.30	5.24	12.84	12.81	5.21	5.15	12.75	12.75	
10915007	5.35	5.36	12.91	12.82	5.28	5.26	12.81	12.83	5.24	5.16	12.74	12.74	5.26	5.34	12.93	12.88	5.28	5.24	12.82	12.83	5.23	5.17	12.75	12.75	
10915008	5.32	5.34	12.90	12.88	5.30	5.23	12.81	12.86	5.22	5.17	12.75	12.76	5.25	5.35	12.92	12.91	5.27	5.22	12.85	12.84	5.22	5.18	12.76	12.76	
10915009	5.33	5.34	12.89	12.87	5.31	5.26	12.82	12.82	5.22	5.16	12.75	12.75	5.34	5.33	12.92	12.88	5.31	5.23	12.81	12.86	5.23	5.16	12.76	12.76	
10915010	5.36	5.34	12.93	12.89	5.30	5.26	12.80	12.84	5.22	5.18	12.75	12.76	5.32	5.34	12.91	12.92	5.31	5.24	12.83	12.83	5.23	5.17	12.75	12.75	
10915011	5.33	5.34	12.93	12.88	5.30	5.26	12.82	12.83	5.21	5.17	12.76	12.77	5.26	5.35	12.91	12.88	5.28	5.25	12.85	12.85	5.23	5.18	12.75	12.75	
10915012	5.35	5.34	12.90	12.93	5.29	5.24	12.84	12.85	5.22	5.15	12.76	12.76	5.33	5.34	12.92	12.89	5.29	5.24	12.85	12.82	5.22	5.18	12.75	12.75	
10915013	5.35	5.36	12.88	12.92	5.29	5.24	12.82	12.83	5.21	5.16	12.77	12.74	5.26	5.33	12.88	12.87	5.30	5.24	12.83	12.83	5.22	5.15	12.77	12.77	
10915014	5.35	5.35	12.93	12.91	5.30	5.23	12.83	12.80	5.22	5.17	12.74	12.74	5.25	5.35	12.89	12.89	5.27	5.24	12.86	12.82	5.23	5.15	12.75	12.75	
10915015	5.33	5.35	12.89	12.87	5.29	5.24	12.84	12.81	5.24	5.16	12.76	12.75	5.36	5.34	12.90	12.91	5.30	5.24	12.84	12.81	5.21	5.16	12.74	12.74	
10915016	5.33	5.33	12.91	12.88	5.30	5.22	12.80	12.84	5.21	5.15	12.75	12.74	5.35	5.33	12.91	12.89	5.28	5.24	12.81	12.83	5.23	5.15	12.77	12.77	
10915017	5.34	5.35	12.90	12.90	5.29	5.22	12.84	12.85	5.24	5.16	12.77	12.75	5.32	5.32	12.91	12.91	5.28	5.24	12.82	12.82	5.23	5.18	12.75	12.75	
10915018	5.36	5.35	12.93	12.92	5.30	5.24	12.83	12.86	5.25	5.17	12.77	12.76	5.32	5.35	12.89	12.88	5.27	5.25	12.83	12.83	5.24	5.15	12.77	12.77	
10915019	5.35	5.33	12.88	12.89	5.28	5.24	12.84	12.83	5.25	5.17	12.74	12.76	5.33	5.34	12.91	12.88	5.28	5.24	12.82	12.85	5.22	5.17	12.75	12.75	
10915020	5.35	5.35	12.91	12.91	5.28	5.24	12.84	12.84	5.24	5.17	12.75	12.75	5.36	5.35	12.89	12.88	5.29	5.24	12.83	12.80	5.21	5.16	12.75	12.75	
10915021	5.35	5.34	12.88	12.92	5.29	5.24	12.82	12.84	5.25	5.18	12.76	12.74	5.35	5.33	12.90	12.92	5.31	5.24	12.83	12.82	5.25	5.18	12.77	12.77	
10915022	5.35	5.33	12.90	12.90	5.29	5.24	12.84	12.84	5.22	5.19	12.75	12.75	5.34	5.32	12.89	12.88	5.30	5.23	12.85	12.86	5.22	5.16	12.75	12.75	
10915023	5.33	5.35	12.88	12.90	5.30	5.26	12.81	12.81	5.21	5.18	12.76	12.74	5.35	5.32	12.90	12.90	5.29	5.25	12.83	12.83	5.24	5.19	12.77	12.77	
10915024	5.33	5.32	12.89	12.89	5.27	5.22	12.85	12.82	5.23	5.17	12.75	12.75	5.36	5.34	12.88	12.92	5.30	5.23	12.80	12.83	5.23	5.17	12.75	12.75	
10915025	5.35	5.33	12.91	12.89	5.30	5.23	12.83	12.81	5.24	5.17	12.74	12.76	5.34	5.34	12.91	12.91	5.29	5.24	12.82	12.85	5.24	5.17	12.74	12.74	
10915026	5.33	5.35	12.93	12.92	5.28	5.25	12.82	12.83	5.21	5.17	12.76	12.75	5.34	5.34	12.89	12.88	5.30	5.24	12.84	12.81	5.21	5.15	12.74	12.74	
10915027	5.33	5.35	12.90	12.90	5.30	5.26	12.81	12.85	5.21	5.16	12.74	12.76	5.33	5.32	12.89	12.89	5.29	5.23	12.83	12.83	5.25	5.15	12.75	12.75	
10915028	5.35	5.34	12.89	12.88	5.30	5.24	12.81	12.82	5.21	5.17	12.77	12.76	5.35	5.35	12.91	12.91	5.29	5.22	12.82	12.82	5.23	5.18	12.76	12.76	
10915029	5.34	5.36	12.92	12.92	5.28	5.24	12.81	12.82	5.22	5.19	12.75	12.75	5.35	5.35	12.87	12.87	5.28	5.23	12.84	12.85	5.24	5.18	12.75	12.75	
10915030	5.34	5.33	12.88	12.90	5.30	5.25	12.86	12.80	5.24	5.16	12.76	12.77	5.34	5.33	12.88	12.88	5.30	5.26	12.81	12.82	5.23	5.17	12.74	12.74	
10915031	5.35	5.34	12.91	12.82	5.29	5.25	12.83	12.81	5.22	5.19	12.75	12.76	5.33	5.33	12.88	12.88	5.28	5.22	12.82	12.85	5.21	5.17	12.75	12.75	
10915032	5.34	5.34	12.91	12.88	5.30	5.25	12.86	12.86	5.24	5.17	12.76	12.76	5.32	5.32	12.91	12.92	5.29	5.25	12.83	12.84	5.24	5.17	12.75	12.75	
10915033	5.33	5.35	12.91	12.81	5.27	5.23	12.83	12.82	5.22	5.17	12.76	12.76	5.33	5.32	12.90	12.90	5.28	5.24	12.83	12.83	5.21	5.19	12.76	12.76	
10915034	5.35	5.33	12.91	12.89	5.27	5.24	12.84	12.84	5.24	5.16	12.76	12.77	5.33	5.32	12.89	12.89	5.29	5.26	12.84	12.84	5.23	5.17	12.74	12.74	
10915035	5.33	5.34	12.88	12.88	5.28	5.24	12.81	12.81	5.24	5.16	12.77	12.75	5.33	5.36	12.88	12.88	5.28	5.22	12.82	12.85	5.21	5.17	12.76	12.76	
10915036	5.33	5.36	12.89	12.91	5.29	5.25	12.82	12.82	5.22	5.15	12.75	12.75	5.36	5.36	12.89	12.93	5.29	5.23	12.82	12.82	5.24	5.16	12.76	12.76	
10915037	5.32	5.33	12.87	12.88	5.28	5.24	12.86	12.83	5.24	5.15	12.74	12.76	5.33	5.32	12.91	12.92	5.29	5.25	12.83	12.84	5.24	5.18	12.75	12.75	
10915038	5.33	5.36	12.88	12.89	5.29	5.25	12.82	12.85	5.24	5.17	12.77	12.75	5.33	5.32	12.90	12.90	5.29	5.25	12.86	12.81	5.23	5.16	12.75	12.75	
10915039	5.33	5.34	12.90	12.89	5.28	5.24	12.81	12.81	5.22	5.15	12.75	12.75	5.34	5.32	12.91	12.89	5.30	5.24	12.86	12.81	5.24	5.16	12.76	12.76	
10915040	5.33	5.33	12.88																						

■ ALT TEST & OUTPUT VOLTAGE DATA

1) MODEL 번호 : P04920
2) 시험 온도 : 11~10.28
3) 시험 전압 : 90V / 110V
4) 부류 조건 : MIN / TYP / MAX
5) 시험 단위 : 품질보증원 어동기ID

SPEC	90V MIN				90V TYP				90V MAX				110V MIN				110V TYP				110V MAX				
	Vout	AV	B5V	12.8V	Vamp	AV	B5V	12.8V	Vamp	AV	B5V	12.8V	Vamp	AV	B5V	12.8V	Vamp	AV	B5V	12.8V	Vamp	AV	B5V	12.8V	Vamp
OUTPUT VOLTAGE	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	5.04V	5.04	11.88	11.88	11.88
	5.57V	5.57	13.13	13.13	5.57V	5.57	13.13	13.13	5.57V	5.57	13.13	13.13	5.57V	5.57	13.13	13.13	5.57V	5.57	13.13	13.13	5.57V	5.57	13.13	13.13	13.13
No	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	5.3V	5.3V	12.8V	12.8V	12.8V
110280001	5.32	5.35	12.92	12.89	5.30	5.23	12.81	12.80	5.23	5.18	12.74	12.76	5.34	5.34	12.90	12.90	5.27	5.24	12.80	12.85	5.22	5.17	12.75	12.76	12.76
110280002	5.35	5.36	12.89	12.90	5.30	5.22	12.84	12.84	5.24	5.16	12.76	12.75	5.32	5.32	12.88	12.91	5.29	5.25	12.82	12.82	5.24	5.16	12.77	12.77	12.76
110280003	5.33	5.33	12.92	12.90	5.31	5.23	12.81	12.85	5.23	5.17	12.74	12.74	5.34	5.32	12.90	12.88	5.30	5.24	12.83	12.82	5.17	5.17	12.75	12.74	12.74
110280004	5.33	5.33	12.87	12.90	5.28	5.25	12.85	12.85	5.23	5.19	12.75	12.76	5.35	5.34	12.89	12.89	5.28	5.25	12.83	12.82	5.25	5.19	12.75	12.75	12.74
110280005	5.35	5.35	12.91	12.92	5.31	5.25	12.82	12.81	5.23	5.15	12.76	12.74	5.35	5.33	12.92	12.88	5.30	5.23	12.85	12.85	5.24	5.17	12.75	12.75	12.75
110280006	5.35	5.33	12.90	12.89	5.29	5.24	12.82	12.83	5.25	5.17	12.77	12.74	5.34	5.35	12.90	12.89	5.30	5.23	12.84	12.85	5.22	5.16	12.74	12.75	12.75
110280007	5.33	5.34	12.88	12.91	5.30	5.26	12.83	12.86	5.23	5.16	12.75	12.76	5.33	5.36	12.88	12.90	5.27	5.25	12.83	12.81	5.24	5.16	12.78	12.74	12.74
110280008	5.34	5.36	12.92	12.90	5.31	5.26	12.82	12.81	5.23	5.17	12.76	12.75	5.36	5.35	12.93	12.87	5.30	5.23	12.85	12.82	5.22	5.16	12.75	12.77	12.77
110280009	5.34	5.33	12.87	12.93	5.29	5.22	12.82	12.84	5.24	5.16	12.75	12.75	5.35	5.35	12.91	12.90	5.31	5.25	12.84	12.84	5.24	5.18	12.77	12.76	12.76
110280010	5.35	5.33	12.87	12.89	5.30	5.23	12.80	12.86	5.23	5.16	12.75	12.76	5.36	5.33	12.88	12.93	5.30	5.26	12.84	12.84	5.24	5.16	12.75	12.75	12.75
110280011	5.35	5.33	12.90	12.88	5.30	5.24	12.86	12.84	5.24	5.18	12.76	12.74	5.34	5.33	12.90	12.91	5.27	5.23	12.82	12.85	5.23	5.19	12.78	12.77	12.77
110280012	5.35	5.32	12.91	12.89	5.28	5.25	12.85	12.82	5.21	5.17	12.76	12.75	5.36	5.34	12.89	12.90	5.27	5.22	12.82	12.84	5.25	5.18	12.75	12.75	12.75
110280013	5.35	5.35	12.89	12.87	5.27	5.25	12.82	12.85	5.21	5.17	12.76	12.75	5.34	5.34	12.92	12.88	5.30	5.23	12.81	12.83	5.23	5.16	12.74	12.74	12.74
110280014	5.34	5.35	12.90	12.90	5.31	5.24	12.81	12.80	5.21	5.18	12.76	12.76	5.32	5.36	12.88	12.89	5.27	5.22	12.82	12.82	5.25	5.16	12.77	12.74	12.74
110280015	5.33	5.35	12.93	12.89	5.30	5.22	12.82	12.80	5.22	5.16	12.76	12.75	5.32	5.34	12.92	12.92	5.28	5.24	12.82	12.82	5.25	5.18	12.78	12.75	12.75
110280016	5.35	5.33	12.88	12.91	5.27	5.26	12.83	12.84	5.24	5.18	12.76	12.74	5.35	5.36	12.91	12.89	5.29	5.23	12.80	12.81	5.24	5.17	12.75	12.76	12.76
110280017	5.33	5.35	12.92	12.89	5.30	5.22	12.82	12.84	5.25	5.19	12.76	12.76	5.35	5.33	12.92	12.91	5.28	5.22	12.84	12.84	5.22	5.16	12.75	12.76	12.76
110280018	5.35	5.32	12.90	12.89	5.30	5.25	12.81	12.84	5.22	5.16	12.76	12.77	5.33	5.36	12.90	12.88	5.29	5.25	12.83	12.86	5.24	5.16	12.74	12.76	12.76
110280019	5.35	5.34	12.88	12.91	5.30	5.23	12.84	12.84	5.25	5.18	12.77	12.75	5.34	5.34	12.91	12.92	5.30	5.22	12.84	12.84	5.24	5.17	12.75	12.74	12.74
110280020	5.34	5.36	12.91	12.93	5.31	5.23	12.82	12.86	5.23	5.15	12.75	12.75	5.33	5.34	12.93	12.88	5.28	5.25	12.82	12.81	5.22	5.16	12.76	12.76	12.77
110280021	5.33	5.35	12.91	12.91	5.29	5.26	12.83	12.84	5.22	5.19	12.75	12.75	5.36	5.35	12.92	12.93	5.28	5.23	12.80	12.83	5.23	5.15	12.76	12.75	12.75
110280022	5.35	5.35	12.87	12.89	5.29	5.22	12.85	12.84	5.24	5.17	12.76	12.76	5.35	5.34	12.93	12.92	5.27	5.25	12.83	12.83	5.24	5.15	12.77	12.76	12.76
110280023	5.32	5.34	12.91	12.91	5.30	5.23	12.85	12.85	5.24	5.16	12.75	12.75	5.35	5.33	12.88	12.93	5.29	5.22	12.82	12.82	5.25	5.15	12.76	12.75	12.75
110280024	5.34	5.35	12.90	12.92	5.27	5.26	12.82	12.83	5.24	5.18	12.76	12.77	5.34	5.34	12.90	12.89	5.28	5.25	12.81	12.84	5.22	5.17	12.74	12.74	12.74
110280025	5.35	5.33	12.89	12.92	5.30	5.22	12.83	12.86	5.24	5.16	12.76	12.75	5.33	5.33	12.92	12.87	5.30	5.25	12.83	12.85	5.23	5.18	12.74	12.75	12.75
110280026	5.33	5.34	12.91	12.88	5.27	5.24	12.83	12.83	5.21	5.19	12.77	12.74	5.32	5.33	12.89	12.91	5.30	5.23	12.84	12.84	5.25	5.15	12.77	12.76	12.76
110280027	5.34	5.36	12.88	12.93	5.29	5.27	12.83	12.84	5.23	5.17	12.77	12.76	5.34	5.33	12.89	12.92	5.30	5.23	12.84	12.81	5.24	5.17	12.76	12.76	12.76
110280028	5.34	5.34	12.90	12.87	5.30	5.26	12.86	12.86	5.23	5.15	12.76	12.75	5.34	5.33	12.88	12.89	5.31	5.24	12.85	12.80	5.24	5.17	12.74	12.74	12.74
110280029	5.35	5.35	12.89	12.90	5.27	5.25	12.85	12.81	5.22	5.17	12.74	12.77	5.34	5.35	12.93	12.93	5.28	5.22	12.84	12.83	5.23	5.16	12.74	12.75	12.75
110280030	5.36	5.33	12.91	12.91	5.30	5.25	12.84	12.83	5.24	5.16	12.74	12.76	5.33	5.34	12.90	12.89	5.28	5.26	12.85	12.82	5.22	5.18	12.75	12.76	12.76
110280031	5.34	5.32	12.91	12.87	5.28	5.25	12.82	12.81	5.24	5.18	12.74	12.76	5.34	5.34	12.90	12.91	5.30	5.24	12.83	12.82	5.21	5.18	12.76	12.76	12.76
110280032	5.36	5.34	12.87	12.88	5.30	5.24	12.84	12.81	5.25	5.17	12.74	12.74	5.35	5.35	12.91	12.91	5.31	5.25	12.86	12.81	5.23	5.18	12.75	12.75	12.75
110280033	5.33	5.36	12.88	12.90	5.28	5.23	12.86	12.84	5.23	5.17	12.77	12.76	5.35	5.36	12.91	12.93	5.28	5.22	12.80	12.80	5.22	5.16	12.75	12.76	12.76
110280034	5.35	5.34	12.89	12.90	5.31	5.24	12.85	12.80	5.22	5.18	12.77	12.75	5.32	5.32	12.91	12.93	5.29	5.26	12.82	12.84	5.22	5.18	12.76	12.76	12.76
110280035	5.33	5.33	12.88	12.88	5.26	5.26	12.85	12.83	5.22	5.17	12.77	12.77	5.33	5.33	12.87	12.88	5.29	5.25	12.86	12.84	5.22	5.18	12.74	12.75	12.75
110280036	5.35	5.36	12.88	12.91	5.28	5.24	12.85	12.84	5.23	5.16	12.77	12.76	5.32	5.36	12.93	12.92	5.28	5.23	12.84	12.81	5.23	5.18	12.74	12.74	12.74
110280037	5.33	5.36	12.91	12.92	5.27	5.24	12.80																		

SPEC	220V MIN				220V TYP				220V MAX				254V MIN				254V TYP				254V MAX					
	ASV	BSV	12.8V	Vamp	ASV	BSV	12.8V	Vamp	ASV	BSV	12.8V	Vamp	ASV	BSV	12.8V	Vamp	ASV	BSV	12.8V	Vamp	ASV	BSV	12.8V	Vamp		
OUTPUT VOLTAGE	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	5.04	11.88	5.04V	
	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	5.57	13.13	5.57V	
Ro	5.3V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V	5.3V	12.8V	5.3V		
110280001	5.34	5.35	12.91	5.28	5.25	12.80	5.21	5.17	12.74	5.33	5.35	12.92	5.28	5.24	12.80	5.23	5.18	12.75	5.23	5.18	12.75	5.23	5.18	12.74	5.23	
110280002	5.35	5.32	12.89	5.27	5.25	12.83	5.25	5.18	12.78	5.33	5.36	12.88	5.22	5.22	12.83	5.24	5.17	12.75	5.24	5.17	12.75	5.24	5.17	12.75	5.24	
110280003	5.35	5.32	12.90	5.28	5.21	12.82	5.23	5.17	12.75	5.34	5.33	12.91	5.20	5.21	12.82	5.22	5.15	12.74	5.22	5.15	12.74	5.22	5.15	12.74	5.22	
110280004	5.33	5.32	12.92	5.29	5.25	12.85	5.20	5.17	12.78	5.36	5.34	12.87	5.27	5.20	12.84	5.21	5.17	12.75	5.21	5.17	12.75	5.21	5.17	12.76	5.21	
110280005	5.34	5.36	12.90	5.27	5.24	12.81	5.24	5.18	12.76	5.33	5.34	12.91	5.21	5.23	12.82	5.24	5.16	12.76	5.24	5.16	12.76	5.24	5.16	12.76	5.24	
110280006	5.35	5.34	12.91	5.30	5.23	12.82	5.23	5.17	12.75	5.35	5.36	12.88	5.28	5.23	12.83	5.25	5.15	12.75	5.25	5.15	12.75	5.25	5.15	12.75	5.25	
110280007	5.33	5.36	12.90	5.21	5.21	12.83	5.23	5.15	12.77	5.34	5.32	12.90	5.20	5.23	12.80	5.23	5.19	12.75	5.23	5.19	12.75	5.23	5.19	12.75	5.23	
110280008	5.34	5.34	12.91	5.29	5.25	12.83	5.23	5.16	12.78	5.33	5.34	12.92	5.29	5.24	12.84	5.22	5.18	12.77	5.22	5.18	12.77	5.22	5.18	12.77	5.22	
110280009	5.33	5.33	12.90	5.29	5.28	12.86	5.24	5.16	12.75	5.33	5.36	12.89	5.21	5.21	12.81	5.23	5.18	12.75	5.23	5.18	12.75	5.23	5.18	12.75	5.23	
110280010	5.33	5.32	12.88	5.20	5.25	12.85	5.22	5.17	12.74	5.35	5.33	12.87	5.29	5.25	12.84	5.22	5.16	12.76	5.22	5.16	12.76	5.22	5.16	12.76	5.22	
110280011	5.32	5.35	12.93	5.28	5.27	12.84	5.22	5.17	12.74	5.33	5.33	12.91	5.29	5.23	12.84	5.23	5.22	12.75	5.23	5.22	12.75	5.23	5.22	12.74	5.23	
110280012	5.32	5.33	12.90	5.28	5.22	12.82	5.21	5.17	12.75	5.33	5.34	12.92	5.29	5.22	12.86	5.22	5.16	12.74	5.21	5.16	12.74	5.21	5.16	12.74	5.21	
110280013	5.34	5.34	12.87	5.20	5.28	5.25	12.85	5.22	5.17	12.77	5.24	5.33	12.89	5.29	5.24	12.84	5.23	5.19	12.76	5.24	5.19	12.76	5.24	5.19	12.76	5.24
110280014	5.33	5.34	12.89	5.21	5.27	5.22	12.81	5.23	5.17	12.75	5.27	5.35	12.87	5.29	5.22	12.83	5.21	5.15	12.75	5.21	5.15	12.75	5.21	5.15	12.75	5.21
110280015	5.34	5.34	12.89	5.20	5.29	5.25	12.84	5.21	5.18	12.77	5.35	5.34	12.89	5.20	5.27	12.85	5.24	5.16	12.75	5.24	5.16	12.75	5.24	5.16	12.75	5.24
110280016	5.35	5.32	12.89	5.28	5.24	12.80	5.21	5.15	12.75	5.33	5.35	12.93	5.28	5.25	12.84	5.25	5.19	12.77	5.25	5.19	12.76	5.25	5.19	12.76	5.25	
110280017	5.35	5.36	12.90	5.22	5.28	5.23	12.81	5.25	5.19	12.75	5.34	5.33	12.90	5.29	5.28	12.84	5.23	5.18	12.76	5.23	5.18	12.76	5.23	5.18	12.76	5.23
110280018	5.35	5.35	12.89	5.21	5.28	5.24	12.84	5.22	5.18	12.74	5.33	5.35	12.93	5.30	5.23	12.80	5.24	5.16	12.75	5.24	5.16	12.75	5.24	5.16	12.75	5.24
110280019	5.35	5.35	12.89	5.27	5.31	5.26	12.80	5.25	5.19	12.74	5.32	5.34	12.87	5.27	5.23	12.82	5.21	5.18	12.77	5.23	5.18	12.76	5.23	5.18	12.76	5.23
110280020	5.34	5.32	12.90	5.29	5.29	5.26	12.83	5.24	5.18	12.74	5.35	5.34	12.89	5.29	5.24	12.85	5.23	5.15	12.75	5.22	5.15	12.74	5.22	5.15	12.74	5.22
110280021	5.33	5.35	12.91	5.20	5.27	5.24	12.84	5.23	5.16	12.74	5.32	5.35	12.92	5.28	5.27	12.86	5.23	5.19	12.75	5.23	5.19	12.75	5.23	5.19	12.75	5.23
110280022	5.35	5.34	12.90	5.22	5.28	5.24	12.81	5.24	5.15	12.74	5.31	5.35	12.88	5.31	5.23	12.82	5.24	5.16	12.75	5.24	5.16	12.75	5.24	5.16	12.75	5.24
110280023	5.34	5.34	12.91	5.29	5.25	12.84	5.23	5.16	12.77	5.34	5.34	12.93	5.27	5.24	12.84	5.24	5.18	12.75	5.24	5.18	12.75	5.24	5.18	12.75	5.24	
110280024	5.33	5.36	12.91	5.27	5.30	5.25	12.83	5.22	5.15	12.74	5.32	5.34	12.92	5.28	5.24	12.81	5.23	5.18	12.76	5.23	5.18	12.76	5.23	5.18	12.76	5.23
110280025	5.33	5.33	12.90	5.22	5.30	5.24	12.84	5.23	5.17	12.75	5.32	5.32	12.92	5.27	5.25	12.83	5.26	5.19	12.75	5.26	5.19	12.75	5.26	5.19	12.75	5.26
110280026	5.34	5.35	12.89	5.28	5.31	5.24	12.84	5.24	5.18	12.77	5.35	5.35	12.90	5.29	5.23	12.84	5.21	5.17	12.77	5.21	5.17	12.77	5.21	5.17	12.77	5.21
110280027	5.35	5.36	12.91	5.29	5.23	12.86	5.23	5.17	12.77	5.36	5.36	12.87	5.28	5.24	12.83	5.23	5.18	12.75	5.23	5.18	12.75	5.23	5.18	12.75	5.23	
110280028	5.34	5.32	12.91	5.28	5.30	5.24	12.85	5.24	5.17	12.75	5.35	5.32	12.87	5.28	5.25	12.86	5.24	5.15	12.77	5.24	5.15	12.76	5.24	5.15	12.76	5.24
110280029	5.35	5.34	12.90	5.28	5.28	5.22	12.82	5.21	5.23	12.76	5.33	5.34	12.91	5.28	5.27	12.82	5.21	5.17	12.75	5.21	5.17	12.75	5.21	5.17	12.75	5.21
110280030	5.33	5.34	12.88	5.21	5.27	5.23	12.83	5.24	5.16	12.75	5.33	5.34	12.90	5.27	5.26	12.84	5.22	5.15	12.75	5.22	5.15	12.75	5.22	5.15	12.75	5.22
110280031	5.33	5.35	12.91	5.31	5.24	12.82	5.23	5.18	12.75	5.34	5.33	12.92	5.28	5.27	12.84	5.24	5.16	12.75	5.24	5.16	12.75	5.24	5.16	12.75	5.24	
110280032	5.33	5.34	12.89	5.28	5.22	12.88	5.23	5.19	12.75	5.33	5.36	12.92	5.29	5.27	12.82	5.23	5.17	12.75	5.23	5.17	12.75	5.23	5.17	12.75	5.23	
110280033	5.34	5.35	12.92	5.27	5.30	5.25	12.88	5.24	5.16	12.75	5.33	5.34	12.89	5.28	5.25	12.84	5.21	5.16	12.76	5.21	5.16	12.76	5.21	5.16	12.76	5.21
110280034	5.32	5.32	12.87	5.29	5.29	5.25	12.80	5.23	5.18	12.76	5.34	5.34	12.89	5.30	5.23	12.82	5.21	5.15	12.75	5.21	5.15	12.75	5.21	5.15	12.75	5.21
110280035	5.34	5.32	12.87	5.21	5.29	5.25	12.80	5.23	5.18	12.76	5.34	5.34	12.89	5.30	5.23	12.82	5.21	5.15	12.75	5.21	5.15	12.75	5.21	5.15	12.75	5.21
110280036	5.33	5.34	12.90	5.28	5.27	5.25	12.84	5.24	5.19	12.76	5.34	5.34	12.89	5.28	5.26	12.81	5.22	5.17	12.74	5.22	5.17	12.74	5.22	5.17	12.74	5.22
110280037	5.33	5.32	12.88	5.29	5.28	5.24	12.81	5.23	5.18	12.75	5.35	5.36	12.92	5.29	5.27	12.82	5.23	5.17	12.75	5.23	5.17	12.75	5.23	5.17</td		



SPECIFICATION
PD46B2Q_CDY
(STRESS DATA)

STD RECORD NO.
BN44-00522B
PAGE PUB. DATE
2011.12.13
PAGE REV. DATE
2012.01.13

9. STRESS DATA

Resistor

대외비

LOC NO	Spec.					Measurement				Rating Ratio			Result	Remark
	Type	M.W.V. (V)	Res. (Ω)	Power (W)	Temp. (℃)	V(peak) (V)	V/I(RMS):(V/mA)	Power (mW)	Temp (℃)	Volt (80%)	Power (50%)	Temp. (80℃)		
VR9800	VR-SEMI	100	20000	0.5	125	3.89	1.9	V	0.0	44.6	3.9	0.0	44.6	0
RS802	R-METAL OXIDE(S)	350	100000	2	155	191	117.0	V	6.8	67.4	54.6	6.8	67.4	0
RS804	R-METAL OXIDE(S)	350	100000	2	155	191	117.0	V	6.8	66.6	54.6	6.8	66.6	0
RM838	R-METAL OXIDE(S)	350	47000	2	155	77.4	69.5	V	5.1	59.9	22.1	5.1	59.9	0
RP817	R-METAL OXIDE(S)	350	4.7	2	155	14.9	1.2	V	16.1	45.0	4.3	16.1	45.0	0
R9879	R-WIRE WOUND	200	3.3	2	155	1.27	0.1	V	0.1	43.1	0.6	0.1	43.1	0
R9880	R-WIRE WOUND	200	3.3	2	155	1.29	0.1	V	0.1	50.7	0.6	0.1	50.7	0
R9888	R-WIRE WOUND	200	3.3	2	155	1.29	0.1	V	0.1	48.3	0.6	0.1	48.3	0
R9889	R-WIRE WOUND	200	3.3	2	155	1.31	0.1	V	0.1	50.4	0.7	0.1	50.4	0
RS805	R-WIRE WOUND	200	0.51	2	155	2.447	0.1	V	1.7	60.3	1.2	1.7	60.3	0
R9842	R-WIRE WOUND	200	0.12	2	155	3.16	0.0	V	0.2	40.0	1.6	0.2	40.0	0
R9843	R-WIRE WOUND	200	0.12	2	155	2.95	0.0	V	0.2	45.6	1.5	0.2	45.6	0
R9863	R-WIRE WOUND	200	0.12	2	155	2.91	0.0	V	0.2	41.2	1.5	0.2	41.2	0
R9864	R-WIRE WOUND	200	0.12	2	155	3.26	0.0	V	0.2	45.7	1.6	0.2	45.7	0
RP801	R-WIRE WOUND	200	0.12	2	155	2.53	0.2	V	12.6	67.6	1.3	12.6	67.6	0
RP802	R-WIRE WOUND	200	0.12	2	155	2.53	0.2	V	12.6	73.9	1.3	12.6	73.9	0
RP823	R-CHIP	200	2000000	0.25	155	130.98	79.5	V	1.3	51.6	65.5	1.3	51.6	0
RP824	R-CHIP	200	2000000	0.25	155	92.7	79.3	V	1.3	50.5	46.4	1.3	50.5	0
RP825	R-CHIP	200	2000000	0.25	155	92.5	77.5	V	1.2	49.9	46.3	1.2	49.9	0
RP826	R-CHIP	200	2000000	0.25	155	88.1	72.9	V	1.1	47.7	44.1	1.1	47.7	0
RP829	R-CHIP	200	2000000	0.25	155	144.7	79.7	V	1.3	51.9	72.4	1.3	51.9	0
RP830	R-CHIP	200	2000000	0.25	155	144.7	78.5	V	1.2	51.1	72.4	1.2	51.1	0
RP831	R-CHIP	200	2000000	0.25	155	132.7	75.0	V	1.1	50.3	66.4	1.1	50.3	0
RP832	R-CHIP	200	2000000	0.25	155	132.5	73.7	V	1.1	48.0	66.3	1.1	48.0	0
RS810	R-CHIP	200	1000000	0.25	155	141	84.7	V	2.9	52.0	70.5	2.9	52.0	0
RS811	R-CHIP	200	1000000	0.25	155	99.7	84.1	V	2.8	52.2	49.9	2.8	52.2	0
RS812	R-CHIP	200	1000000	0.25	155	100.5	83.9	V	2.8	50.1	50.3	2.8	50.1	0
RS813	R-CHIP	200	1000000	0.25	155	129.1	84.8	V	2.9	50.6	64.6	2.9	50.6	0
RX801S	R-CHIP	200	470000	0.25	155	120.71	69.1	V	4.1	48.7	60.4	4.1	48.7	0
RX802S	R-CHIP	200	470000	0.25	155	114.2	62.1	V	3.3	49.3	57.1	3.3	49.3	0
RX803S	R-CHIP	200	470000	0.25	155	120.9	62.2	V	3.3	48.4	60.5	3.3	48.4	0
RX804S	R-CHIP	200	470000	0.25	155	121.96	68.9	V	4.0	48.7	61.0	4.0	48.7	0
R9827	R-CHIP	200	220000	0.25	155	35.16	29.9	V	1.6	48.1	17.6	1.6	48.1	0
R9845	R-CHIP	200	220000	0.25	155	83.26	69.7	V	8.8	40.0	41.6	8.8	40.0	0
R9846	R-CHIP	200	220000	0.25	155	90.28	77.7	V	11.0	41.2	45.1	11.0	41.2	0
R9848	R-CHIP	200	220000	0.25	155	85.7	69.8	V	8.9	45.5	42.9	8.9	45.5	0
R9849	R-CHIP	200	220000	0.25	155	89.2	78.8	V	11.3	40.0	44.6	11.3	40.0	0
R9868	R-CHIP	200	220000	0.25	155	79.7	69.8	V	8.9	41.5	39.9	8.9	41.5	0
R9869	R-CHIP	200	220000	0.25	155	87.7	86.8	V	13.7	41.9	43.9	13.7	41.9	0

R9871	R-CHIP	200	220000	0.25	155	79.9	70.2	V	9.0	42.7	40.0	9.0	42.7	0	
R9872	R-CHIP	200	220000	0.25	155	87.6	83.0	V	12.5	44.9	43.8	12.5	44.9	0	
R9927	R-CHIP	200	220000	0.25	155	33.7	29.1	V	1.5	49.7	16.9	1.5	49.7	0	
R9912	R-CHIP	50	1000	0.1	155	0.44	0.2	V	0.0	43.2	0.9	0.0	43.2	0	
R9913	R-CHIP	50	1000	0.1	155	0.43	0.2	V	0.0	43.0	0.9	0.0	43.0	0	
R9914	R-CHIP	50	1000	0.1	155	0.44	0.2	V	0.0	42.8	0.9	0.0	42.8	0	
R9915	R-CHIP	50	1000	0.1	155	0.43	0.2	V	0.0	42.7	0.9	0.0	42.7	0	
RP803	R-CHIP	200	47	0.25	155	1.63	0.1	V	0.1	59.2	0.8	0.1	59.2	0	
RM822	R-CHIP	200	47	0.25	155	2.1	0.4	V	1.5	51.8	1.1	1.5	51.8	0	
RM823	R-CHIP	200	47	0.25	155	2.11	0.4	V	1.5	54.4	1.1	1.5	54.4	0	
RM824	R-CHIP	200	47	0.25	155	2.11	0.4	V	1.5	53.7	1.1	1.5	53.7	0	
RM827	R-CHIP	200	47	0.25	155	2.1	0.4	V	1.5	57.1	1.1	1.5	57.1	0	
RS803	R-CHIP	200	1.2	0.25	155	12.25	0.0	V	0.1	62.3	6.1	0.1	62.3	0	
RS828	R-CHIP	200	1.2	0.25	155	14.5	0.2	V	7.5	72.8	7.3	7.5	72.8	0	
RS814	R-CHIP	150	120000	0.125	155	18.17	11.0	V	0.8	50.8	12.1	0.8	50.8	0	
RM807	R-CHIP	150	22000	0.125	155	116.7	25.3	V	23.3	47.6	77.8	23.3	47.6	0	
RM808	R-CHIP	150	22000	0.125	155	111.7	26.3	V	25.2	48.7	74.5	25.2	48.7	0	
RM809	R-CHIP	150	22000	0.125	155	111.5	25.6	V	23.8	62.9	74.3	23.8	62.9	0	
RM810	R-CHIP	150	22000	0.125	155	116	25.7	V	24.0	49.3	77.3	24.0	49.3	0	
RM811	R-CHIP	150	22000	0.125	155	41.7	19.5	V	13.8	49.6	27.8	13.8	49.6	0	
RM812	R-CHIP	150	22000	0.125	155	78.5	22.2	V	17.9	47.6	52.3	17.9	47.6	0	
RP812	R-CHIP	150	10000	0.125	155	16	12.7	V	12.9	53.9	10.7	12.9	53.9	0	
RP813	R-CHIP	150	10000	0.125	155	16.3	12.7	V	12.9	43.2	10.9	12.9	43.2	0	
RM819	R-CHIP	150	10000	0.125	155	19.2	13.3	V	14.2	51.3	12.8	14.2	51.3	0	
RM820	R-CHIP	150	10000	0.125	155	19	13.4	V	14.4	50.2	12.7	14.4	50.2	0	
RM860	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	70.0	9.2	41.0	70.0	0	
RM861	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	68.4	9.2	41.0	68.4	0	
RM862	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	46.2	9.2	41.0	46.2	0	
RM863	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	70.3	9.2	41.0	70.3	0	
RM864	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	61.1	9.2	41.0	61.1	0	
RM865	R-CHIP	150	3300	0.125	155	13.85	13.0	V	41.0	70.3	9.2	41.0	70.3	0	
R9816	R-CHIP	150	2000	0.125	155	11.5	9.6	V	36.9	50.4	7.7	36.9	50.4	0	
RS807	R-CHIP	200	1000	0.25	155	12.57	3.8	V	5.7	55.4	6.3	5.7	55.4	0	
RS809	R-CHIP	150	910	0.125	155	3.26	0.2	V	0.0	63.5	2.2	0.0	63.5	0	
RS825	R-CHIP	150	910	0.125	155	2.82	0.2	V	0.0	61.1	1.9	0.0	61.1	0	
RS815	R-CHIP	150	330	0.125	155	3.82	0.2	V	0.1	55.4	2.5	0.1	55.4	0	
RS819	R-CHIP	150	330	0.125	155	4.97	4.3	V	44.0	57.4	3.3	44.0	57.4	0	
RP808	R-CHIP	200	100	0.25	155	15.59	1.6	V	9.9	54.2	7.8	9.9	54.2	0	
RP809	R-CHIP	200	100	0.25	155	15.88	1.6	V	9.6	56.8	7.9	9.6	56.8	0	
R9850	R-CHIP	150	100	0.125	155	0.97	0.1	V	0.2	40.0	0.6	0.2	40.0	0	
RS820	R-CHIP	150	68	0.125	155	2.19	0.1	V	0.1	65.8	1.5	0.1	65.8	0	
RM816	R-CHIP	150	47	0.125	155	3.32	0.6	V	7.1	50.6	2.2	7.1	50.6	0	
RM817	R-CHIP	150	47	0.125	155	6.22	0.9	V	13.2	49.9	4.1	13.2	49.9	0	
RP814	R-CHIP	150	47	0.125	155	2.22	0.3	V	1.1	48.6	1.5	1.1	48.6	0	
RP815	R-CHIP	150	22	0.125	155	2.57	0.1	V	0.5	44.7	1.7	0.5	44.7	0	
RM813	R-CHIP	150	22	0.125	155	2.19	0.5	V	9.8	49.8	1.5	9.8	49.8	0	
RM814	R-CHIP	150	22	0.125	155	2.64	0.5	V	10.6	48.1	1.8	10.6	48.1	0	

RM815	R-CHIP	150	22	0.125	155	5.9	0.3	V	4.0	48.0	3.9	4.0	48.0	0	
RP806	R-CHIP	150	10	0.125	155	2.62	0.1	V	1.0	47.5	1.7	1.0	47.5	0	
RP807	R-CHIP	150	10	0.125	155	1.29	0.4	V	12.8	47.2	0.9	12.8	47.2	0	
RP810	R-CHIP	150	10	0.125	155	6.45	0.4	V	9.8	51.9	4.3	9.8	51.9	0	
RP811	R-CHIP	150	10	0.125	155	5.87	0.4	V	11.6	46.2	3.9	11.6	46.2	0	
RM805	R-CHIP	50	1200000	0.1	155	7.8	4.0	V	0.0	46.3	15.6	0.0	46.3	0	
RQ835	R-CHIP	50	1000000	0.1	155	4	0.1	V	0.0	51.6	8.0	0.0	51.6	0	
RM842	R-CHIP	50	1000000	0.1	155	8.92	6.0	V	0.0	63.0	17.8	0.0	63.0	0	
RM846	R-CHIP	50	1000000	0.1	155	14.43	12.1	V	0.1	58.6	28.9	0.1	58.6	0	
RM847	R-CHIP	50	1000000	0.1	155	12.92	10.5	V	0.1	57.5	25.8	0.1	57.5	0	
R9825	R-CHIP	50	1000000	0.1	155	5.22	3.4	V	0.0	48.5	10.4	0.0	48.5	0	
RM804	R-CHIP	150	680000	0.125	155	2	0.7	V	0.0	44.7	1.3	0.0	44.7	0	
RQ827	R-CHIP	50	470000	0.1	155	2.67	0.2	V	0.0	50.9	5.3	0.0	50.9	0	
R9815	R-CHIP	50	470000	0.1	155	1.03	0.7	V	0.0	41.8	2.1	0.0	41.8	0	
RP833	R-CHIP	150	220000	0.125	155	4.23	2.3	V	0.0	52.9	2.8	0.0	52.9	0	
RP827	R-CHIP	50	180000	0.1	155	6.9	3.1	V	0.1	47.7	13.8	0.1	47.7	0	
RS821	R-CHIP	50	150000	0.1	155	5	2.5	V	0.0	56.4	10.0	0.0	56.4	0	
RS823	R-CHIP	50	150000	0.1	155	4.67	2.9	V	0.1	57.7	9.3	0.1	57.7	0	
RS806	R-CHIP	50	100000	0.1	155	31.4	21.2	V	4.5	55.6	62.8	4.5	55.6	0	
RS826	R-CHIP	50	100000	0.1	155	8.2	2.4	V	0.1	60.6	16.4	0.1	60.6	0	
RM844	R-CHIP	50	100000	0.1	155	16	13.7	V	1.9	56.2	32.0	1.9	56.2	0	
RM845	R-CHIP	50	100000	0.1	155	12.8	1.8	V	0.0	53.9	25.6	0.0	53.9	0	
R9877	R-CHIP	50	100000	0.1	155	12.3	10.3	V	1.1	40.0	24.6	1.1	40.0	0	
R9878	R-CHIP	50	100000	0.1	155	12.5	10.4	V	1.1	40.0	25.0	1.1	40.0	0	
R9886	R-CHIP	50	100000	0.1	155	12.2	10.5	V	1.1	46.1	24.4	1.1	46.1	0	
R9887	R-CHIP	50	100000	0.1	155	12.3	10.5	V	1.1	44.8	24.6	1.1	44.8	0	
RP805	R-CHIP	50	68000	0.1	155	2.18	0.9	V	0.0	47.9	4.4	0.0	47.9	0	
RP828	R-CHIP	50	68000	0.1	155	6.72	1.5	V	0.0	47.9	13.4	0.0	47.9	0	
RP834	R-CHIP	50	68000	0.1	155	4.05	2.2	V	0.1	51.3	8.1	0.1	51.3	0	
RP804	R-CHIP	50	51000	0.1	155	2.44	1.1	V	0.0	46.4	4.9	0.0	46.4	0	
R9826	R-CHIP	50	47000	0.1	155	7.24	7.0	V	1.0	48.8	14.5	1.0	48.8	0	
RS827	R-CHIP	50	43000	0.1	155	9.34	2.5	V	0.2	54.4	18.7	0.2	54.4	0	
RM801	R-CHIP	50	27000	0.1	155	9.69	3.1	V	0.3	48.2	19.4	0.3	48.2	0	
R9830	R-CHIP	50	27000	0.1	155	1.17	0.2	V	0.0	40.0	2.3	0.0	40.0	0	
R9831	R-CHIP	50	27000	0.1	155	1.15	0.2	V	0.0	42.6	2.3	0.0	42.6	0	
R9857	R-CHIP	50	27000	0.1	155	1.19	0.2	V	0.0	40.0	2.4	0.0	40.0	0	
R9858	R-CHIP	50	27000	0.1	155	0.057	0.1	V	0.0	43.1	0.1	0.0	43.1	0	
RS818	R-CHIP	50	24000	0.1	155	3.1	0.3	V	0.0	52.3	6.2	0.0	52.3	0	
R9821	R-CHIP	50	18000	0.1	155	4.2	3.0	V	0.5	40.0	8.4	0.5	40.0	0	
RS801	R-CHIP	50	20000	0.1	155	7.02	1.4	V	0.1	56.9	14.0	0.1	56.9	0	
RS817	R-CHIP	50	20000	0.1	155	4.82	2.5	V	0.3	56.7	9.6	0.3	56.7	0	
RS822	R-CHIP	50	20000	0.1	155	4.82	2.5	V	0.3	58.5	9.6	0.3	58.5	0	
R9807	R-CHIP	50	20000	0.1	155	1.13	0.1	V	0.0	43.6	2.3	0.0	43.6	0	
R9802	R-CHIP	50	20000	0.1	155	3.72	2.1	V	0.2	40.0	7.4	0.2	40.0	0	
R9893	R-CHIP	50	20000	0.1	155	2.91	2.0	V	0.2	40.0	5.8	0.2	40.0	0	
R9800	R-CHIP	50	12000	0.1	155	2.99	0.9	V	0.1	40.0	6.0	0.1	40.0	0	
R9853	R-CHIP	50	18000	0.1	155	3.26	3.0	V	0.5	41.6	6.5	0.5	41.6	0	

R9895	R-CHIP	50	18000	0.1	155	3.16	3.1	V	0.5	41.5	6.3	0.5	41.5	0	
R9897	R-CHIP	50	18000	0.1	155	3.03	3.0	V	0.5	41.2	6.1	0.5	41.2	0	
R9899	R-CHIP	50	18000	0.1	155	3.1	3.0	V	0.5	40.5	6.2	0.5	40.5	0	
R9992	R-CHIP	50	10000	0.1	155	3.02	0.9	V	0.1	45.1	6.0	0.1	45.1	0	
R9993	R-CHIP	50	12000	0.1	155	3.02	0.9	V	0.1	40.0	6.0	0.1	40.0	0	
RQ802	R-CHIP	50	10000	0.1	155	6.39	4.7	V	2.2	54.0	12.8	2.2	54.0	0	
RM826	R-CHIP	50	10000	0.1	155	6.17	1.0	V	0.1	50.3	12.3	0.1	50.3	0	
RM828	R-CHIP	50	10000	0.1	155	1.87	0.1	V	0.0	50.2	3.7	0.0	50.2	0	
R9805	R-CHIP	50	10000	0.1	155	3.07	2.3	V	0.5	46.2	6.1	0.5	46.2	0	
R9806	R-CHIP	50	10000	0.1	155	3.07	2.2	V	0.5	45.8	6.1	0.5	45.8	0	
R9808	R-CHIP	50	10000	0.1	155	13	12.2	V	15.0	40.1	26.0	15.0	40.1	0	
R9809	R-CHIP	50	10000	0.1	155	1.34	9.7	V	9.4	49.8	2.7	9.4	49.8	0	
R9812	R-CHIP	50	10000	0.1	155	3.47	2.4	V	0.6	40.4	6.9	0.6	40.4	0	
R9822	R-CHIP	50	10000	0.1	155	6.42	5.3	V	2.8	42.2	12.8	2.8	42.2	0	
R9836	R-CHIP	50	10000	0.1	155	13.12	6.4	V	4.1	40.0	26.2	4.1	40.0	0	
R9837	R-CHIP	50	10000	0.1	155	13.12	6.5	V	4.2	44.6	26.2	4.2	44.6	0	
R9861	R-CHIP	50	10000	0.1	155	13.22	6.4	V	4.1	44.1	26.4	4.1	44.1	0	
R9862	R-CHIP	50	10000	0.1	155	13.29	6.4	V	4.1	42.0	26.6	4.1	42.0	0	
R9896	R-CHIP	50	10000	0.1	155	12.88	6.5	V	4.3	40.0	25.8	4.3	40.0	0	
R9904	R-CHIP	50	10000	0.1	155	3.42	2.3	V	0.5	42.9	6.8	0.5	42.9	0	
R9905	R-CHIP	50	10000	0.1	155	3.44	2.3	V	0.5	42.5	6.9	0.5	42.5	0	
R9908	R-CHIP	50	10000	0.1	155	3.45	2.3	V	0.5	41.7	6.9	0.5	41.7	0	
R9910	R-CHIP	50	10000	0.1	155	3.4	2.3	V	0.5	42.2	6.8	0.5	42.2	0	
R9801	R-CHIP	50	10000	0.1	155	2.62	2.1	V	0.4	40.0	5.2	0.4	40.0	0	
R9804	R-CHIP	50	3000	0.1	155	2.56	0.3	V	0.0	40.0	5.1	0.0	40.0	0	
RM806	R-CHIP	50	6800	0.1	155	14.1	0.6	V	0.1	53.7	28.2	0.1	53.7	0	
RM830	R-CHIP	50	5600	0.1	155	11.5	5.3	V	5.1	56.3	23.0	5.1	56.3	0	
RM831	R-CHIP	50	5600	0.1	155	8.6	4.5	V	3.6	53.1	17.2	3.6	53.1	0	
R9844	R-CHIP	50	5600	0.1	155	3.1	2.5	V	1.1	40.0	6.2	1.1	40.0	0	
R9847	R-CHIP	50	5600	0.1	155	3.1	2.5	V	1.1	41.9	6.2	1.1	41.9	0	
R9867	R-CHIP	50	5600	0.1	155	3.2	2.4	V	1.0	40.0	6.4	1.0	40.0	0	
R9870	R-CHIP	50	5600	0.1	155	3.1	2.5	V	1.1	41.8	6.2	1.1	41.8	0	
RQ801	R-CHIP	50	4700	0.1	155	16.6	12.9	V	35.1	56.3	33.2	35.1	56.3	0	
RS816	R-CHIP	50	4700	0.1	155	5.5	5.0	V	5.3	53.8	11.0	5.3	53.8	0	
R9851	R-CHIP	50	4700	0.1	155	3.4	2.6	V	1.4	42.2	6.8	1.4	42.2	0	
R9852	R-CHIP	50	4700	0.1	155	3.33	2.6	V	1.4	42.8	6.7	1.4	42.8	0	
R9866	R-CHIP	50	4700	0.1	155	8.9	0.5	V	0.1	41.9	17.8	0.1	41.9	0	
R9874	R-CHIP	50	4700	0.1	155	9.2	0.5	V	0.1	40.4	18.4	0.1	40.4	0	
R9882	R-CHIP	50	4700	0.1	155	9.1	0.5	V	0.1	40.0	18.2	0.1	40.0	0	
R9883	R-CHIP	50	4700	0.1	155	9.9	0.6	V	0.1	41.0	19.8	0.1	41.0	0	
RM825	R-CHIP	50	3600	0.1	155	6.37	2.2	V	1.3	55.6	12.7	1.3	55.6	0	
RM802	R-CHIP	50	2700	0.1	155	11.02	2.6	V	2.4	47.1	22.0	2.4	47.1	0	
RM829	R-CHIP	50	1600	0.1	155	2.06	0.8	V	0.4	43.7	4.1	0.4	43.7	0	
RM832	R-CHIP	50	2700	0.1	155	3.03	2.5	V	2.3	54.1	6.1	2.3	54.1	0	
R9811	R-CHIP	50	2000	0.1	155	3.21	2.2	V	2.4	40.3	6.4	2.4	40.3	0	
R9982	R-CHIP	50	2000	0.1	155	3.25	2.6	V	3.4	44.2	6.5	3.4	44.2	0	
R9824	R-CHIP	50	1500	0.1	155	6.17	2.2	V	3.2	41.5	12.3	3.2	41.5	0	

R9875	R-CHIP	50	1300	0.1	155	5.13	0.2	V	0.0	40.0	10.3	0.0	40.0	0	
R9876	R-CHIP	50	1300	0.1	155	5.32	0.2	V	0.0	41.3	10.6	0.0	41.3	0	
R9884	R-CHIP	50	1300	0.1	155	5.55	0.2	V	0.0	40.0	11.1	0.0	40.0	0	
R9885	R-CHIP	50	1300	0.1	155	5.33	0.2	V	0.0	40.9	10.7	0.0	40.9	0	
RQ803	R-CHIP	50	1000	0.1	155	0.92	0.1	V	0.0	55.5	1.8	0.0	55.5	0	
RM821	R-CHIP	50	1000	0.1	155	12.39	0.4	V	0.2	44.7	24.8	0.2	44.7	0	
RM834	R-CHIP	50	1000	0.1	155	3.04	0.2	V	0.0	55.2	6.1	0.0	55.2	0	
R9810	R-CHIP	50	1000	0.1	155	1.54	0.7	V	0.5	49.7	3.1	0.5	49.7	0	
R9823	R-CHIP	50	1000	0.1	155	9.9	0.1	V	0.0	44.6	19.8	0.0	44.6	0	
R9828	R-CHIP	50	1000	0.1	155	0.51	0.1	V	0.0	45.3	1.0	0.0	45.3	0	
R9829	R-CHIP	50	1000	0.1	155	0.51	0.1	V	0.0	40.0	1.0	0.0	40.0	0	
R9834	R-CHIP	50	1000	0.1	155	5.31	0.2	V	0.0	40.0	10.6	0.0	40.0	0	
R9835	R-CHIP	50	1000	0.1	155	1	0.1	V	0.0	44.7	2.0	0.0	44.7	0	
R9838	R-CHIP	50	1000	0.1	155	0.81	0.1	V	0.0	40.0	1.6	0.0	40.0	0	
R9839	R-CHIP	200	1000	0.25	155	0.78	0.1	V	0.0	40.0	0.4	0.0	40.0	0	
R9840	R-CHIP	50	1000	0.1	155	0.72	0.1	V	0.0	42.0	1.4	0.0	42.0	0	
R9841	R-CHIP	50	1000	0.1	155	0.75	0.1	V	0.0	41.2	1.5	0.0	41.2	0	
R9859	R-CHIP	50	1000	0.1	155	5.31	0.2	V	0.0	43.5	10.6	0.0	43.5	0	
R9860	R-CHIP	50	1000	0.1	155	4.92	0.1	V	0.0	42.1	9.8	0.0	42.1	0	
R9865	R-CHIP	50	1000	0.1	155	5.1	0.2	V	0.0	40.0	10.2	0.0	40.0	0	
R9873	R-CHIP	50	1000	0.1	155	4.99	0.2	V	0.0	40.9	10.0	0.0	40.9	0	
R9881	R-CHIP	50	1000	0.1	155	1	0.8	V	0.6	40.0	2.0	0.6	40.0	0	
R9891	R-CHIP	50	1000	0.1	155	1.81	0.1	V	0.0	40.0	3.6	0.0	40.0	0	
R9892	R-CHIP	50	1000	0.1	155	1.79	0.1	V	0.0	43.4	3.6	0.0	43.4	0	
R9935	R-CHIP	50	1000	0.1	155	1.1	0.8	V	0.7	44.6	2.2	0.7	44.6	0	
RQ804	R-CHIP	50	1000	0.1	155	1.21	0.1	V	0.0	54.7	2.4	0.0	54.7	0	
RM803	R-CHIP	50	820	0.1	155	7.52	0.5	V	0.3	46.8	15.0	0.3	46.8	0	
R9890	R-CHIP	50	910	0.1	155	3.12	0.2	V	0.0	40.0	6.2	0.0	40.0	0	
R9894	R-CHIP	50	910	0.1	155	13.076	0.2	V	0.0	40.0	26.2	0.0	40.0	0	
R9902	R-CHIP	50	1000	0.1	155	3.12	0.2	V	0.0	40.0	6.2	0.0	40.0	0	
R9903	R-CHIP	50	910	0.1	155	13.05	0.2	V	0.0	40.2	26.1	0.0	40.2	0	
R9817	R-CHIP	50	750	0.1	155	0.72	0.1	V	0.0	44.5	1.4	0.0	44.5	0	
R9818	R-CHIP	50	750	0.1	155	0.63	0.1	V	0.0	43.5	1.3	0.0	43.5	0	
R9819	R-CHIP	50	750	0.1	155	0.68	0.1	V	0.0	43.7	1.4	0.0	43.7	0	
R9820	R-CHIP	50	750	0.1	155	0.69	0.1	V	0.0	43.9	1.4	0.0	43.9	0	
R9813	R-CHIP	50	510	0.1	155	1.92	0.4	V	0.3	40.7	3.8	0.3	40.7	0	
R9901	R-CHIP	50	510	0.1	155	2	0.4	V	0.3	40.3	4.0	0.3	40.3	0	
R9951	R-CHIP	50	470	0.1	155	2.52	0.4	V	0.3	40.0	5.0	0.3	40.0	0	
R9981	R-CHIP	50	470	0.1	155	2.34	0.4	V	0.3	44.4	4.7	0.3	44.4	0	
R9900	R-CHIP	50	510	0.1	155	2.1	0.4	V	0.4	40.0	4.2	0.4	40.0	0	
R9814	R-CHIP	50	510	0.1	155	2.17	0.5	V	0.4	40.0	4.3	0.4	40.0	0	
RS808	R-CHIP	150	220	0.125	155	4.2	0.8	V	2.2	50.2	2.8	2.2	50.2	0	
R9854	R-CHIP	50	47	0.1	155	2.3	0.2	V	0.7	40.0	4.6	0.7	40.0	0	
R9918	R-CHIP	50	47	0.1	155	2.2	0.2	V	0.8	41.2	4.4	0.8	41.2	0	
R9933	R-CHIP	50	47	0.1	155	2.4	0.2	V	0.6	43.3	4.8	0.6	43.3	0	
R9934	R-CHIP	50	47	0.1	155	2.21	0.2	V	0.7	43.0	4.4	0.7	43.0	0	
R9994	R-CHIP	50	22	0.1	155	0.8	0.2	V	1.3	40.0	1.6	1.3	40.0	0	

R9995	R-CHIP	50	22	0.1	155	0.8	0.2	V	1.5	40.0	1.6	1.5	40.0	0	
RS824	R-CHIP	50	20	0.1	155	1.91	0.2	V	1.4	53.0	3.8	1.4	53.0	0	
R9832	R-CHIP	50	100	0.1	155	4.3	0.3	V	1.0	40.0	8.6	1.0	40.0	0	
R9833	R-CHIP	50	100	0.1	155	4.68	0.4	V	1.2	46.6	9.4	1.2	46.6	0	
R9855	R-CHIP	50	100	0.1	155	4.47	0.3	V	1.2	45.1	8.9	1.2	45.1	0	
R9856	R-CHIP	50	100	0.1	155	4.25	0.3	V	1.1	40.0	8.5	1.1	40.0	0	

일반 캐패시터

대외비

LOC NO	Spec.				Measurement		Rating Ratio		Result	Remark
	Type	Volt (V)	Cap (nF)	Temp. (°C)	V(peak) (V)	Temp (°C)	Volt (90%)	Temp. (80°C)		
CX802S	C-FILM,MPPF	275	680	85	396.5	40.0	144.2	40.0	0	관리규격에 따르지 않고 국제
CX801S	C-FILM,MPPF	275	100	85	396.5	40.0	144.2	40.0	0	관리규격에 따르지 않고 국제
CY807S	C-CERAMIC,DISC	400	1	85	201.0	40.0	50.3	40.0	0	
CY803S	C-CERAMIC,DISC	400	0.47	85	213.0	60.2	53.3	60.2	0	
CY804S	C-CERAMIC,DISC	400	0.47	85	210.8	60.6	52.7	60.6	0	
CY801S	C-CERAMIC,DISC	400	0.1	85	175.5	40.0	43.9	40.0	0	
CY802S	C-CERAMIC,DISC	400	0.1	85	184.9	40.0	46.2	40.0	0	
CP801S	C-FILM,MPPF	450	1000	105	383.5	40.0	85.2	40.0	0	
CP802S	C-FILM,MPPF	450	1000	105	383.5	40.0	85.2	40.0	0	
CM808S	C-FILM,MPPF	1250	22	105	305.9	40.0	24.5	40.0	0	
CS802	C-FILM,PPF	800	2.2	105	191.0	42.0	23.9	42.0	0	
CP811	C-CERAMIC,DISC	1000	0.22	85	447.0	49.7	44.7	49.7	0	
CM812	C-CERAMIC,DISC	1000	0.22	85	219.7	46.5	22.0	46.5	0	
CS809	C-CERAMIC,DISC	1000	0.022	85	552.0	40.0	55.2	40.0	0	
CP813	C-CERAMIC,DISC	1000	0.022	85	448.0	40.0	44.8	40.0	0	
CM808	C-CERAMIC,DISC	1000	0.022	85	427.0	45.6	42.7	45.6	0	
CM809	C-CERAMIC,DISC	1000	0.022	85	427.0	48.5	42.7	48.5	0	
C9901	C-FILM,MPEF	250	1000	85	118.0	40.0	47.2	40.0	0	
C9902	C-FILM,MPEF	250	1000	85	117.0	40.0	46.8	40.0	0	
C9903	C-FILM,MPEF	250	1000	85	118.0	40.0	47.2	40.0	0	
C9904	C-FILM,MPEF	250	1000	85	118.0	40.0	47.2	40.0	0	
CM801	C-CERAMIC,CHIP	25	1000	85	2.2	47.0	8.7	47.0	0	MLCC: MAX전압SPEC. 70% 적용
CM802	C-CERAMIC,CHIP	25	1000	85	2.2	46.7	8.7	46.7	0	MLCC: MAX전압SPEC. 70% 적용
CM818	C-CERAMIC,CHIP	25	1000	85	13.1	58.0	52.4	58.0	0	MLCC: MAX전압SPEC. 70% 적용
CQ815	C-CERAMIC,CHIP	25	1000	85	1.9	50.6	7.6	50.6	0	MLCC: MAX전압SPEC. 70% 적용
CQ816	C-CERAMIC,CHIP	25	1000	85	0.1	51.1	0.4	51.1	0	MLCC: MAX전압SPEC. 70% 적용
C9802	C-CERAMIC,CHIP	50	100	85	15.0	48.4	30.0	48.4	0	MLCC: MAX전압SPEC. 70% 적용
CP809	C-CERAMIC,CHIP	50	220	85	18.4	48.2	36.8	48.2	0	MLCC: MAX전압SPEC. 70% 적용
CP810	C-CERAMIC,CHIP	50	220	85	3.4	40.0	6.7	40.0	0	MLCC: MAX전압SPEC. 70% 적용
CQ817	C-CERAMIC,CHIP	50	220	85	1.3	47.0	2.6	47.0	0	MLCC: MAX전압SPEC. 70% 적용
CQ818	C-CERAMIC,CHIP	50	220	85	1.8	40.0	3.6	40.0	0	MLCC: MAX전압SPEC. 70% 적용
CS804	C-CERAMIC,CHIP	50	220	85	21.9	47.0	43.8	47.0	0	MLCC: MAX전압SPEC. 70% 적용

CS817	C-CERAMIC,CHIP	50	220	85	3.2	55.5	6.4	55.5	0	MLCC: MAX전압SPEC. 70% 적용
CS819	C-CERAMIC,CHIP	50	220	85	3.2	55.9	6.4	55.9	0	MLCC: MAX전압SPEC. 70% 적용
CS821	C-CERAMIC,CHIP	50	220	85	20.2	49.6	40.4	49.6	0	MLCC: MAX전압SPEC. 70% 적용
CM806	C-CERAMIC,CHIP	50	220	85	18.6	46.1	37.2	46.1	0	MLCC: MAX전압SPEC. 70% 적용
CM821	C-CERAMIC,CHIP	50	220	85	5.4	58.7	10.8	58.7	0	MLCC: MAX전압SPEC. 70% 적용
CM822	C-CERAMIC,CHIP	50	220	85	3.2	61.1	6.4	61.1	0	MLCC: MAX전압SPEC. 70% 적용
C9807	C-CERAMIC,CHIP	50	220	85	13.5	40.0	27.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9808	C-CERAMIC,CHIP	50	220	85	13.6	40.0	27.2	40.0	0	MLCC: MAX전압SPEC. 70% 적용
CP802	C-CERAMIC,CHIP	50	220	85	5.5	47.3	11.0	47.3	0	MLCC: MAX전압SPEC. 70% 적용
CM810	C-CERAMIC,CHIP	50	220	85	7.2	49.7	14.3	49.7	0	MLCC: MAX전압SPEC. 70% 적용
CP806	C-CERAMIC,CHIP	50	100	85	16.6	47.0	33.2	47.0	0	MLCC: MAX전압SPEC. 70% 적용
CP807	C-CERAMIC,CHIP	50	100	85	17.1	45.9	34.2	45.9	0	MLCC: MAX전압SPEC. 70% 적용
CS805	C-CERAMIC,CHIP	50	100	85	4.2	55.9	8.5	55.9	0	MLCC: MAX전압SPEC. 70% 적용
CS818	C-CERAMIC,CHIP	50	100	85	2.4	40.0	4.9	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9804	C-CERAMIC,CHIP	50	100	85	7.4	49.6	14.8	49.6	0	MLCC: MAX전압SPEC. 70% 적용
C9835	C-CERAMIC,CHIP	50	100	85	0.3	42.5	0.6	42.5	0	MLCC: MAX전압SPEC. 70% 적용
C9836	C-CERAMIC,CHIP	50	100	85	12.5	42.8	25.0	42.8	0	MLCC: MAX전압SPEC. 70% 적용
C9838	C-CERAMIC,CHIP	50	100	85	15.2	40.0	30.4	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9842	C-CERAMIC,CHIP	50	100	85	11.9	44.2	23.8	44.2	0	MLCC: MAX전압SPEC. 70% 적용
C9844	C-CERAMIC,CHIP	50	100	85	12.6	47.3	25.2	47.3	0	MLCC: MAX전압SPEC. 70% 적용
C9850	C-CERAMIC,CHIP	50	100	85	12.5	40.0	25.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9851	C-CERAMIC,CHIP	50	100	85	15.2	40.0	30.4	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9852	C-CERAMIC,CHIP	50	100	85	11.9	40.0	23.8	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9853	C-CERAMIC,CHIP	50	100	85	12.6	40.0	25.2	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9858	C-CERAMIC,CHIP	50	100	85	11.8	40.0	23.6	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9854	C-CERAMIC,CHIP	25	10	85	2.5	40.0	10.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9855	C-CERAMIC,CHIP	25	10	85	2.5	40.0	10.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9856	C-CERAMIC,CHIP	25	10	85	2.4	40.0	9.6	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9857	C-CERAMIC,CHIP	25	10	85	2.5	40.0	10.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9837	C-CERAMIC,CHIP	25	4.7	85	2.5	41.5	10.0	41.5	0	MLCC: MAX전압SPEC. 70% 적용
C9841	C-CERAMIC,CHIP	25	4.7	85	2.5	43.6	10.0	43.6	0	MLCC: MAX전압SPEC. 70% 적용
C9843	C-CERAMIC,CHIP	25	4.7	85	2.4	47.2	9.6	47.2	0	MLCC: MAX전압SPEC. 70% 적용
C9845	C-CERAMIC,CHIP	25	4.7	85	2.5	48.4	10.0	48.4	0	MLCC: MAX전압SPEC. 70% 적용
C9859	C-CERAMIC,CHIP	50	0.47	85	4.4	41.8	8.8	41.8	0	MLCC: MAX전압SPEC. 70% 적용
C9864	C-CERAMIC,CHIP	50	0.47	85	4.4	41.9	8.9	41.9	0	MLCC: MAX전압SPEC. 70% 적용
C9865	C-CERAMIC,CHIP	50	0.47	85	4.4	42.5	8.8	42.5	0	MLCC: MAX전압SPEC. 70% 적용
C9866	C-CERAMIC,CHIP	50	0.47	85	4.5	41.6	8.9	41.6	0	MLCC: MAX전압SPEC. 70% 적용
CM805	C-CERAMIC,CHIP	50	22	85	3.8	44.9	7.6	44.9	0	MLCC: MAX전압SPEC. 70% 적용
CM814	C-CERAMIC,CHIP	50	22	85	4.2	54.3	8.4	54.3	0	MLCC: MAX전압SPEC. 70% 적용

CP808	C-CERAMIC,CHIP	50	2.2	85	1.9	46.5	3.8	46.5	0	MLCC: MAX전압SPEC. 70% 적용
CS815	C-CERAMIC,CHIP	50	0.22	85	2.5	52.2	5.0	52.2	0	MLCC: MAX전압SPEC. 70% 적용
CP803	C-CERAMIC,CHIP	50	220	85	6.8	48.1	13.7	48.1	0	MLCC: MAX전압SPEC. 70% 적용
CS807	C-CERAMIC,CHIP	50	100	85	22.4	63.8	44.8	63.8	0	MLCC: MAX전압SPEC. 70% 적용
CS814	C-CERAMIC,CHIP	50	100	85	2.3	53.2	4.6	53.2	0	MLCC: MAX전압SPEC. 70% 적용
CM811	C-CERAMIC,CHIP	50	100	85	8.0	52.4	16.0	52.4	0	MLCC: MAX전압SPEC. 70% 적용
CM813	C-CERAMIC,CHIP	50	100	85	11.2	53.4	22.4	53.4	0	MLCC: MAX전압SPEC. 70% 적용
CM817	C-CERAMIC,CHIP	50	100	85	14.4	54.9	28.8	54.9	0	MLCC: MAX전압SPEC. 70% 적용
CM823	C-CERAMIC,CHIP	50	100	85	3.5	42.2	7.0	42.2	0	MLCC: MAX전압SPEC. 70% 적용
C9800	C-CERAMIC,CHIP	50	100	85	1.5	48.9	3.1	48.9	0	MLCC: MAX전압SPEC. 70% 적용
C9801	C-CERAMIC,CHIP	50	100	85	4.4	40.5	8.8	40.5	0	MLCC: MAX전압SPEC. 70% 적용
C9803	C-CERAMIC,CHIP	50	100	85	3.4	47.7	6.8	47.7	0	MLCC: MAX전압SPEC. 70% 적용
C9839	C-CERAMIC,CHIP	50	100	85	2.9	43.1	5.8	43.1	0	MLCC: MAX전압SPEC. 70% 적용
CP804	C-CERAMIC,CHIP	50	10	85	2.6	47.5	5.2	47.5	0	MLCC: MAX전압SPEC. 70% 적용
CS806	C-CERAMIC,CHIP	50	10	85	12.5	54.9	25.0	54.9	0	MLCC: MAX전압SPEC. 70% 적용
CS816	C-CERAMIC,CHIP	50	10	85	4.6	57.1	9.2	57.1	0	MLCC: MAX전압SPEC. 70% 적용
CM824	C-CERAMIC,CHIP	50	10	85	2.2	44.2	4.5	44.2	0	MLCC: MAX전압SPEC. 70% 적용
C9809	C-CERAMIC,CHIP	50	10	85	1.6	42.8	3.2	42.8	0	MLCC: MAX전압SPEC. 70% 적용
C9810	C-CERAMIC,CHIP	50	10	85	1.6	42.1	3.2	42.1	0	MLCC: MAX전압SPEC. 70% 적용
C9819	C-CERAMIC,CHIP	50	10	85	0.8	40.0	1.7	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9820	C-CERAMIC,CHIP	50	10	85	0.9	41.9	1.8	41.9	0	MLCC: MAX전압SPEC. 70% 적용
C9823	C-CERAMIC,CHIP	50	10	85	1.5	40.0	2.9	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9824	C-CERAMIC,CHIP	50	10	85	1.5	41.8	3.0	41.8	0	MLCC: MAX전압SPEC. 70% 적용
CP805	C-CERAMIC,CHIP	50	1	85	4.2	50.8	8.5	50.8	0	MLCC: MAX전압SPEC. 70% 적용
CQ802	C-CERAMIC,CHIP	50	1	85	0.3	52.5	0.6	52.5	0	MLCC: MAX전압SPEC. 70% 적용
C9805	C-CERAMIC,CHIP	50	1	85	1.3	40.7	2.6	40.7	0	MLCC: MAX전압SPEC. 70% 적용
C9806	C-CERAMIC,CHIP	50	1	85	1.3	41.1	2.7	41.1	0	MLCC: MAX전압SPEC. 70% 적용
C9811	C-CERAMIC,CHIP	50	1	85	1.6	40.0	3.1	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9812	C-CERAMIC,CHIP	50	1	85	1.6	40.0	3.3	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9813	C-CERAMIC,CHIP	50	1	85	0.5	40.0	1.1	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9814	C-CERAMIC,CHIP	50	1	85	0.5	42.4	1.1	42.4	0	MLCC: MAX전압SPEC. 70% 적용
C9821	C-CERAMIC,CHIP	50	1	85	0.5	42.2	1.1	42.2	0	MLCC: MAX전압SPEC. 70% 적용
C9822	C-CERAMIC,CHIP	50	1	85	0.5	41.5	0.9	41.5	0	MLCC: MAX전압SPEC. 70% 적용
C9825	C-CERAMIC,CHIP	50	1	85	2.5	40.0	5.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9826	C-CERAMIC,CHIP	50	1	85	2.5	40.4	5.0	40.4	0	MLCC: MAX전압SPEC. 70% 적용
C9829	C-CERAMIC,CHIP	50	1	85	1.5	40.0	2.9	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9830	C-CERAMIC,CHIP	50	1	85	1.4	41.0	2.8	41.0	0	MLCC: MAX전압SPEC. 70% 적용
C9833	C-CERAMIC,CHIP	50	1	85	1.4	40.0	2.9	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9834	C-CERAMIC,CHIP	50	1	85	1.5	41.5	2.9	41.5	0	MLCC: MAX전압SPEC. 70% 적용

CP814	C-CERAMIC,CHIP	50	0.47	85	6.9	50.5	13.7	50.5	0	MLCC: MAX전압SPEC. 70% 적용
C9815	C-CERAMIC,CHIP	50	0.33	85	3.0	40.0	6.0	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9816	C-CERAMIC,CHIP	50	0.33	85	2.9	40.0	5.8	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9827	C-CERAMIC,CHIP	50	0.33	85	3.1	40.0	6.1	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9828	C-CERAMIC,CHIP	50	0.33	85	3.1	40.5	6.1	40.5	0	MLCC: MAX전압SPEC. 70% 적용
C9860	C-CERAMIC,CHIP	50	0.1	85	4.5	42.2	9.1	42.2	0	MLCC: MAX전압SPEC. 70% 적용
C9861	C-CERAMIC,CHIP	50	0.1	85	4.6	41.2	9.1	41.2	0	MLCC: MAX전압SPEC. 70% 적용
C9862	C-CERAMIC,CHIP	50	0.1	85	4.5	40.0	9.1	40.0	0	MLCC: MAX전압SPEC. 70% 적용
C9863	C-CERAMIC,CHIP	50	0.1	85	4.6	41.3	9.1	41.3	0	MLCC: MAX전압SPEC. 70% 적용

알루미늄 캐퍼시터

대외비

LOC. NO.	Spec.									Measurement			Rating Ratio			Result	Remark
	Vender : P/N : Series	Temp. (°C)	Life (hrs)	Cap (uF)	Volt (V)	I(RMS) (mA)	FT	Ff	I(RMS) (mA)	V(peak) (V)	I(RMS) (mA)	Temp (°C)	V (90%)	I (100%)	MTTF (hrs)		
CP815S	삼영 : NZE450VB68uF : NZE	105	2000	68	450	467	1.0	1.50	700.5	403.0	651.0	52.3	89.6	92.9	50,753	0	
CP816S	삼영 : NZE450VB68uF : NZE	105	2000	68	450	467	1.0	1.50	700.5	403.0	626.0	54.3	89.6	89.4	45,600	0	
CS801	삼영 : NZE450VB22uF : NZE	105	2000	22	450	346	1.0	1.00	346.0	403.0	268.0	52.5	89.6	77.5	56,887	0	
C9817	삼화 : BH250VB22uF : BH	105	5000	22	250	550	1.0	1.00	550.0	106.0	368.0	53.0	42.4	66.9	147,907	0	
C9818	삼화 : BH250VB22uF : BH	105	5000	22	250	550	1.0	1.00	550.0	106.0	368.0	51.8	42.4	66.9	160,736	0	
C9831	삼화 : BH250VB22uF : BH	105	5000	22	250	550	1.0	1.00	550.0	107.0	369.0	57.0	42.8	67.1	111,960	0	
C9832	삼화 : BH250VB22uF : BH	105	5000	22	250	550	1.0	1.00	550.0	107.0	367.0	54.2	42.8	66.7	136,263	0	
CM815	삼영 : NZE200VB100uF : NZE	105	2000	100	200	535	1.0	1.60	856.0	67.0	809.0	54.9	33.5	94.5	41,781	0	
CM819	삼영 : NZE200VB100uF : NZE	105	2000	100	200	535	1.0	1.60	856.0	67.0	676.0	55.3	33.5	79.0	46,316	0	
CM803	삼영 : NXB25VB470uF : NXB	105	4000	470	25	1030	1.0	0.96	988.8	15.3	879.0	54.3	61.2	88.9	91,572	0	
CM804	삼영 : NXB25VB470uF : NXB	105	4000	470	25	1030	1.0	0.96	988.8	15.6	891.0	53.3	62.4	90.1	97,115	0	
CM820	삼영 : NXB25VB470uF : NXB	105	4000	470	25	1030	1.0	0.96	988.8	15.3	927.0	54.3	61.2	93.8	87,716	0	
CS825	삼영 : NXB25VB470uF : NXB	105	4000	470	25	1030	1.0	0.96	988.8	7.0	323.0	55.3	28.1	32.7	119,040	0	
CS811	삼영 : NXB16VB2200uF : NXB	105	4000	2200	16	2150	1.0	0.95	2042.5	7.1	1853.0	57.7	44.3	90.7	71,203	0	
CS812	삼영 : NXB16VB2200uF : NXB	105	4000	2200	16	2150	1.0	0.95	2042.5	7.0	1595.0	57.1	43.7	78.1	82,318	0	
CS808	삼화 : LZ50VB47uF : LZ	105	6000	47	50	450	1.0	0.91	409.5	22.0	360.0	61.0	44.0	87.9	87,062	0	
CS803	삼화 : ZS1H226M6L007PS : ZS	105	2000	22	50	260	1.0	0.87	226.2	19.0	34.0	56.2	38.0	15.0	58,250	0	
CM816	삼화 : ZS1H226M6L007PS : ZS	105	2000	22	50	260	1.0	0.87	226.2	15.3	27.0	55.2	30.6	11.9	62,684	0	

다이오드

대외비

LOC NO	Spec.				Measurement				Rating Ratio			Result	Remark
	Name	V(RRM) (V)	I(MEAN) (mA)	Temp (°C)	V(RRM) (V)	I(MEAN) (mA)	Temp (°C)	V(RRM) (80%)	I(MEAN) (70%)	Temp (80°C)			
BD801S	D15XB60	600	15000	150	403.0	2188.0	75.8	67.2	14.6	75.8	0		
DS812	FMEN-220A	100	20000	150	78.6	5400.0	75.4	78.6	27.0	75.4	0		
DM810	FMEN-220A	100	20000	150	54.4	1690.0	73.5	54.4	8.5	73.5	0		
DM813	FMEN-220A	100	20000	150	54.4	1500.0	72.7	54.4	7.5	72.7	0		
DM811	SFF1005GA	300	10000	150	80.0	1219.0	70.1	26.7	12.2	70.1	0		
DM814	SFF1005G	300	10000	150	79.0	1281.0	40.0	26.3	12.8	40.0	0		
DP804	BYV29FX-600	600	9000	150	442.0	1788.0	56.5	73.7	19.9	56.5	0		
D9809	SF26G	400	2000	150	105.0	451.0	50.7	26.3	22.6	50.7	0		
D9812	SF26G	400	2000	150	103.0	451.0	48.3	25.8	22.6	48.3	0		
D9813	SF26G	400	2000	150	103.0	456.0	54.9	25.8	22.8	54.9	0		
D9818	SF26G	400	2000	150	105.0	449.0	44.6	26.3	22.5	44.6	0		
DS806	1N4007S	1000	1000	150	390.0	306.0	60.2	39.0	30.6	60.2	0		
DS814	1N4007S	1000	1000	150	250.0	10.0	66.1	25.0	1.0	66.1	0		
DS815	1N4007S	1000	1000	150	442.0	10.0	65.3	44.2	1.0	65.3	0		
DS804	FR157G	1000	1500	150	530.0	97.0	74.4	53.0	6.5	74.4	0		
DS808	FR157G	1000	1500	150	201.0	82.0	70.9	20.1	5.5	70.9	0		
DS807	UF4007	1000	1000	150	150.0	19.0	65.1	15.0	1.9	65.1	0		
DP801	1N5408-09	1000	3000	150	358.0	13.0	40.0	35.8	0.4	40.0	0		
DP805	1N5408-09	1000	3000	150	358.0	12.9	40.0	35.8	0.4	40.0	0		
DM815	SR24E	40	2000	150	2.1	795.0	65.6	5.3	39.8	65.6	0		
DM816	SR24E	40	2000	150	2.1	788.0	59.7	5.3	39.4	59.7	0		
DS809	LBAT54ALT1G	30	200	150	2.4	23.0	60.0	7.9	11.5	60.0	0		
DM804	LBAT54ALT1G	30	200	150	18.4	15.6	44.0	61.3	7.8	44.0	0		
DM805	LBAT54ALT1G	30	200	150	19.5	15.3	48.4	65.0	7.7	48.4	0		
DS803	LMBD2838LT1G	75	100	125	5.3	2.0	45.0	7.1	2.0	45.0	0		
DP802	LMDL6050T1G	70	200	150	15.4	32.0	52.2	22.0	16.0	52.2	0		
DP803	LMDL6050T1G	70	200	150	15.0	33.0	48.0	21.4	16.5	48.0	0		
DQ815	LMDL6050T1G	70	200	150	1.8	1.0	40.0	2.6	0.5	40.0	0		
DQ816	LMDL6050T1G	70	200	150	1.8	1.0	40.4	2.5	0.5	40.4	0		
DS801	LMDL6050T1G	70	200	150	15.3	5.2	59.2	21.9	2.6	59.2	0		
DS810	LMDL6050T1G	70	200	150	1.4	15.0	65.3	2.1	7.5	65.3	0		
DS813	LMDL6050T1G	70	200	150	2.1	1.5	71.1	3.1	0.8	71.1	0		

DM802	LMDL6050T1G	70	200	150	2.8	8.6	46.0	4.0	4.3	46.0	0	
DM803	LMDL6050T1G	70	200	150	2.2	4.2	40.0	3.2	2.1	40.0	0	
DM806	LMDL6050T1G	70	200	150	5.4	9.4	50.7	7.7	4.7	50.7	0	
DM807	LMDL6050T1G	70	200	150	3.5	8.8	51.5	5.0	4.4	51.5	0	
DM808	LMDL6050T1G	70	200	150	8.5	3.5	62.8	12.1	1.8	62.8	0	
DM809	LMDL6050T1G	70	200	150	9.0	2.5	60.8	12.9	1.3	60.8	0	
DM817	LMDL6050T1G	70	200	150	12.3	8.3	46.4	17.6	4.2	46.4	0	
DQ811	LMDL6050T1G	70	200	150	0.0	2.5	54.3	0.0	1.3	54.3	0	
DQ812	LMDL6050T1G	70	200	150	3.7	1.0	52.9	5.3	0.5	52.9	0	
DQ813	LMDL6050T1G	70	200	150	0.0	3.0	53.7	0.0	1.5	53.7	0	
D9801	LBAT54CLT1H	30	200	125	2.3	2.3	47.2	7.7	1.2	47.2	0	
D9802	LBAT54CLT1H	30	200	125	2.4	2.5	46.4	7.8	1.3	46.4	0	
D9806	LMDL6050T1G	70	200	150	2.4	8.5	40.0	3.4	4.3	40.0	0	
D9807	LMDL6050T1G	70	200	150	3.3	9.2	46.6	4.7	4.6	46.6	0	
D9810	LMDL6050T1G	70	200	150	3.3	10.7	44.6	4.7	5.4	44.6	0	
D9811	LMDL6050T1G	70	200	150	3.3	9.8	40.0	4.7	4.9	40.0	0	
D9814	LMDL6050T1G	70	200	150	8.3	7.8	40.0	11.8	3.9	40.0	0	
D9815	LMDL6050T1G	70	200	150	8.2	6.8	42.1	11.7	3.4	42.1	0	
D9816	LMDL6050T1G	70	200	150	8.1	9.8	41.3	11.6	4.9	41.3	0	
D9817	LMDL6050T1G	70	200	150	8.1	8.2	40.0	11.6	4.1	40.0	0	

제너 다이오드

대외비

LOC NO	Spec.				Measurement		Rating Ratio		Result	Remark
	Name	Vz (V)	I(MEAN) (mA)	Temp (°C)	Iz(MEAN) (mA)	Temp (°C)	Pd (50%)	Temp (80°C)		
ZDS801	LMSZ5242B	12	20	150	1.5	50.3	3.6	50.3	0	
ZDS802	LMSZ5242B	12	20	150	1.5	64.6	3.6	64.6	0	
ZDS804	LMSZ5242B	12	20	150	1.8	63.4	4.3	63.4	0	
ZDS805	LMSZ5242B	12	20	150	1.7	59.6	4.1	59.6	0	
ZD9801	MM3Z18VT1G	18	5	150	1.5	40.5	13.5	40.5	0	
ZD9802	MM3Z18VT1G	18	5	150	1.4	40.0	12.6	40.0	0	
ZD9803	MM3Z18VT1G	18	5	150	1.9	43.0	17.1	43.0	0	
ZD9804	MM3Z18VT1G	18	5	150	2.1	46.0	18.9	46.0	0	
ZDQ802	MM3Z16VT1G	16	5	150	1.9	54.6	15.2	54.6	0	
ZDS803	BZX84B15LT	15	5	150	1.8	78.9	13.5	78.9	0	
ZDM801	MM3Z15VT1G	15	5	150	1.9	64.6	14.3	64.6	0	
ZDQ803	LM3Z6V8	6.8	5	150	1.7	56.2	5.8	56.2	0	

Transistor

대외비

LOC NO	Spec.					Measurement				Rating Ratio				Result	Remark
	Name	Vce(Peak) (V)	Vbe(Peak) (V)	Ic(DC) (mA)	Temp (°C)	Vce(Peak) (V)	Vbe(Peak) (V)	Ic(Peak) (mA)	Temp (°C)	Vce(Peak) (75%)	Vbe(Peak) (80%)	Ic(Peak) (80%)	Temp (80°C)		
Q9802	KRC101S	50	10	100	150	2.1	6.2	2.2	44.3	4.2	61.5	2.2	44.3	0	
Q9813	KRC101S	50	10	100	150	2.6	4.3	28.0	43.2	5.2	43.0	28.0	43.2	0	
Q9814	KRC101S	50	10	100	150	1.1	1.5	2.0	43.5	2.1	15.0	2.0	43.5	0	
Q9815	KRC101S	50	10	100	150	4.3	5.3	1.3	43.0	8.6	52.5	1.3	43.0	0	
Q9816	KRC101S	50	10	100	150	7.2	6.3	4.8	40.0	14.4	63.0	4.8	40.0	0	
Q9817	KRC101S	50	10	100	150	6.8	5.9	6.1	40.0	13.6	58.5	6.1	40.0	0	
QS802	KTD1624	50	6	3000	150	19.3	1.5	79.0	78.8	38.6	25.0	2.6	78.8	0	
QP801	LMBT2222AL	40	6	600	150	17.1	2.2	151.0	40.0	42.8	36.7	25.2	40.0	0	
QP802	LMBT2222AL	40	6	600	150	17.1	2.1	153.0	50.0	42.8	34.2	25.5	50.0	0	
QQ803	LMBT2222AL	40	6	600	150	2.6	1.0	1.0	52.3	6.5	16.7	0.2	52.3	0	
Q9801	LMBT2222AL	40	6	600	150	13.2	1.3	3.2	49.5	33.0	21.5	0.5	49.5	0	
Q9803	LMBT2222AL	40	6	600	150	5.4	1.9	3.5	40.4	13.5	31.2	0.6	40.4	0	
QP803	LMBT2907AL	60	5	600	150	15.9	2.2	337.0	47.7	26.5	44.8	56.2	47.7	0	
QP804	LMBT2907AL	60	5	600	150	15.8	2.3	332.0	48.3	26.3	46.0	55.3	48.3	0	
QS803	LMBT2907AL	60	5	600	150	19.2	1.9	12.0	57.2	32.0	38.0	2.0	57.2	0	
Q9800	LMBT2907AL	60	5	600	150	5.3	3.3	63.0	48.7	8.8	65.6	10.5	48.7	0	

FET

대외비

Loc No	Spec.					Measurement				Rating Ratio				Result	Remark
	Name	Vds(Peak) (V)	Vgs(Peak) (V)	Id(DC) (mA)	Temp (°C)	Vds(Peak) (V)	Vgs(Peak) (V)	Id(Peak) (mA)	Temp (°C)	Vds(Peak) (90%)	Vgs(Peak) (90%)	Id(Peak) (100%)	Temp (80°C)		
QM801S	TK8A50D	500	30	8000	150	448.0	20.6	2060.0	55.5	89.6	68.7	25.8	55.5	0	
QM802S	TK8A50D	500	30	8000	150	445.0	20.0	2055.0	56.0	89.0	66.7	25.7	56.0	0	
QP805S	MDF11N60	600	30	11000	150	451.0	15.4	2649.0	57.0	75.2	51.3	24.1	57.0	0	
QP806S	MDF11N60	600	30	11000	150	482.0	15.9	2620.0	57.3	80.3	53.0	23.8	57.3	0	
Q9805	TK8A50D	500	30	8000	150	114.0	13.6	1520.0	40.0	22.8	45.3	19.0	40.0	0	
Q9806	TK8A50D	500	30	8000	150	114.0	13.6	1580.0	47.8	22.8	45.3	19.8	47.8	0	
Q9807	TK8A50D	500	30	8000	150	127.0	13.7	1580.0	43.6	25.4	45.7	19.8	43.6	0	
Q9808	TK8A50D	500	30	8000	150	114.0	13.6	1580.0	51.1	22.8	45.3	19.8	51.1	0	
Q9809	KF9N25D	250	30	7500	150	103.0	12.9	248.0	45.3	41.2	43.0	3.3	45.3	0	
Q9810	KF9N25D	250	30	7500	150	102.0	12.5	225.0	51.1	40.8	41.7	3.0	51.1	0	
Q9811	KF9N25D	250	30	7500	150	102.0	12.5	225.0	48.1	40.8	41.7	3.0	48.1	0	
Q9812	KF9N25D	250	30	7500	150	103.0	12.5	222.0	47.7	41.2	41.7	3.0	47.7	0	
QM804	AOD4186	40	20	35000	175	7.6	7.3	5.5	72.9	19.0	36.5	0.0	72.9	0	
QQ801	2N7002K	60	20	300	150	4.7	0.1	1.0	57.6	7.8	0.5	0.3	57.6	0	
QS801	2N7002K	60	20	300	150	5.0	2.7	2.0	62.7	8.3	13.5	0.7	62.7	0	
QQ802	2N7002K	60	20	300	150	2.9	1.5	4.0	53.4	4.8	7.5	1.3	53.4	0	
Q9804	2N7002K	60	20	300	150	5.2	2.2	1.0	41.0	8.7	10.8	0.3	41.0	0	

Inductor

대외비

IC

대외비

LOC NO	Spec.			Measurement		Rating Ratio		Result	Remark
	Name	Vcc(Max) (V)	Temp (°C)	Vcc(Max) (V)	Temp (°C)	Vcc(Max) (80%)	Temp (80°C)		
ICP801	SPC7011F	28	105	18.5	51.6	66.1	51.6	0	
ICS801S	STR2A153D	32	115	18.2	51.4	57.0	51.4	0	
ICM801	UCC25600	37	125	18.5	46.5	50.0	46.5	0	
IC9801	SLC5012M	18	125	13.5	41.0	74.7	41.0	0	
IC9802	SLC5012M	18	125	13.5	44.8	74.7	44.8	0	
IC9804	SLC9012M	20	85	13.5	46.7	67.5	46.7	0	
IC9805	SLC9012M	20	85	13.6	47.3	68.1	47.3	0	
IC9806	SLC9012M	20	85	13.6	47.3	67.8	47.3	0	
IC9807	SLC9012M	20	85	13.8	50.5	68.9	50.5	0	
IC9808	SLC9012M	20	85	13.5	40.0	67.7	40.0	0	
IC9809	SLC9012M	20	85	13.5	40.0	67.6	40.0	0	
IC9810	SLC9012M	20	85	13.5	40.0	67.5	40.0	0	
IC9811	SLC9012M	20	85	13.5	40.0	67.6	40.0	0	
IC9800	AS358MTR-G1	36	85	15.2	47.3	42.2	47.3	0	
ICS802	AS431BNTR-E1	40	125	8.7	53.1	21.8	53.1	0	70% 관리(레귤레이터)
ICS803	AS431BNTR-E1	40	125	5.6	54.1	14.0	54.1	0	70% 관리(레귤레이터)
ICM802	AS431BNTR-E1	40	125	11.1	54.8	27.8	54.8	0	70% 관리(레귤레이터)
IC9803	AS431BNTR-E1	40	125	5.2	55.1	13.1	55.1	0	70% 관리(레귤레이터)

Relay

대외비

Reliability Prediction Report

Part Number	
Environment	Ground,Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CP815S	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:2.58399 Pi T:1.65423	450V 68uF	1	64.1175	0.9994
CP816S	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:2.58399 Pi T:1.58248	450V 68uF	1	61.33658	0.9995
CS801	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:2.51599 Pi T:1.80615	450V 22uF	1	68.16399	0.9994
C9817	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:1.83089 Pi T:1.79828	250V 22uF	1	49.38675	0.9996
C9818	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:1.71189 Pi T:1.72118	250V 22uF	1	44.19702	0.9996
C9831	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:1.61607 Pi T:1.64693	250V 22uF	1	39.92338	0.9997
C9832	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:1.61607 Pi T:1.63242	250V 22uF	1	39.57155	0.9997
CM815	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:0.76797 Pi T:2.08307	200V 100uF	1	23.99619	0.9998
CM819	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:0.76797 Pi T:1.58248	200V 100uF	1	18.22953	0.9998
CM803	Capacitor	Lambda G:15 Pi Q:1.00000 Pi S:1.00000 Pi T:1.87834	25V 470uF	1	28.1751	0.9998
CM804	Capacitor	Lambda G:25 Pi Q:1.00000 Pi S:1.00000 Pi T:1.75937	25V 470uF	1	43.98414	0.9996
CM820	Capacitor	Lambda G:25 Pi Q:1.00000 Pi S:1.04917 Pi T:1.72876	25V 470uF	1	45.34399	0.9996

Reliability Prediction Report

Part Number	
Environment	Ground,Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CS825	Capacitor	Lamda G:15 Pi Q:1.00000 Pi S:0.53068 Pi T:1.58248	25V 470uF	1	12.5968	0.9999
CS811	Capacitor	Lamda G:25 Pi Q:1.00000 Pi S:0.69768 Pi T:1.75937	16V 2200uF	1	30.68669	0.9997
CS812	Capacitor	Lamda G:25 Pi Q:1.00000 Pi S:0.67706 Pi T:1.72876	16V 2200uF	1	29.26165	0.9997
CS808	Capacitor	Lamda G:15 Pi Q:1.00000 Pi S:0.86589 Pi T:1.58248	50V 47uF	1	20.55374	0.9998
CS803	Capacitor	Lamda G:15 Pi Q:1.00000 Pi S:0.78663 Pi T:1.58248	50V 22uF	1	18.67233	0.9998
CM816	Capacitor	Lamda G:15 Pi Q:1.00000 Pi S:0.71462 Pi T:1.58248	50V 22uF	1	16.96314	0.9999
CX802S	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:15.08951 Pi T:1.12534	275V 0.68uF 10% 15mm Pitch ㄱ-Form	1	169.8076	0.9985
CX801S	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:15.08951 Pi T:1.12534	275V 0.1uF 10% 15mm Pitch	1	169.8076	0.9985
CY807S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:1.44629 Pi T:1.05905	400V 1nF	1	1.53169	1
CY803S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.95004 Pi T:1.00888	400V 470pF STRAIGHT TYPE	1	0.95848	1
CY804S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.95004 Pi T:1.00533	400V 470pF STRAIGHT TYPE	1	0.9551	1
CY801S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.69855 Pi T:1.03547	400V 100pF STRAIGHT TYPE	1	0.72333	1

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CY802S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:1.21501 Pi T:1.03547	400V 100pF STRAIGHT TYPE	1	1.2581	1
CP801S	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:9.91892 Pi T:1.07220	450V 1uF 10% 15mm Pitch ↘ forming	1	106.35067	0.9991
CP802S	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:10.31684 Pi T:1.12159	450V 1uF 10% 15mm Pitch ↘ forming	1	115.71278	0.999
CM808S	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:0.34414 Pi T:1.16181	1250V 0.022uF	1	3.99821	1
CS802	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:2.64719 Pi T:1.16181	800V 2.2nF	1	30.75544	0.9997
C9901	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:0.68550 Pi T:1.12159	250V 0.1uF 10mm PITCH	1	7.68856	0.9999
C9902	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:0.66952 Pi T:1.12159	250V 0.1uF 10mm PITCH	1	7.50923	0.9999
C9903	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:0.68550 Pi T:1.12159	250V 0.1uF 10mm PITCH	1	7.68856	0.9999
C9904	Capacitor	Lamda G:10 Pi Q:1.00000 Pi S:0.66952 Pi T:1.12159	250V 0.1uF 10mm PITCH	1	7.50923	0.9999
CP811	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.86632 Pi T:1.21929	1KV 220pF STRAIGHT TYPE	1	1.0563	1
CM812	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.76606 Pi T:1.21929	1KV 220pF STRAIGHT TYPE	1	0.93405	1
CS809	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.25635 Pi T:1.05905	1KV 22pF KINK TYPE	1	0.27149	1

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CM808	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.30204 Pi T:1.05905	1KV 22pF KINK TYPE	1	0.31987	1
CP813	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.30328 Pi T:1.05905	1KV 22pF KINK TYPE	1	0.32119	1
CM809	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.62407 Pi T:1.21181	1KV 22pF KINK TYPE	1	0.75625	1
CY805S	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.39347 Pi T:1.05905	400V 2.2nF STRAIGHT TYPE Lead 4mm	1	0.41671	1
CM801	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:1.77535 Pi T:1.16377	2012 1uF(105)K 25V	1	2.06611	1
CM802	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.25804 Pi T:1.09490	2012 1uF(105)K 25V	1	0.28253	1
CM818	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.21937 Pi T:1.10603	2012 1uF(105)K 25V	1	0.24263	1
CQ815	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.21973 Pi T:1.15273	2012 1uF(105)K 25V	1	0.25329	1
CQ816	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.30703 Pi T:1.10603	2012 1uF(105)K 25V	1	0.33959	1
C9802	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18226 Pi T:1.09431	1608 100nF(104)K 50V	1	0.19945	1
CP803	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.38946 Pi T:1.05905	2012 220nF(224)K 50V	1	0.41246	1
CP809	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.33041	2012 220nF(224)K 50V	1	0.22413	1

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CP810	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.17153 Pi T:1.05905	2012 220nF(224)K 50V	1	0.18166	1
CQ817	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19638 Pi T:1.12942	2012 220nF(224)K 50V	1	0.2218	1
CQ818	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.12358	2012 220nF(224)K 50V	1	0.33494	1
CS804	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.05905	2012 220nF(224)K 50V	1	0.17841	1
CS817	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.09431	2012 220nF(224)K 50V	1	0.21667	1
CS819	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.02957	2012 220nF(224)K 50V	1	0.18811	1
CS821	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.00592	2012 220nF(224)K 50V	1	0.16904	1
CM806	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.24915	2012 220nF(224)K 50V	1	0.24753	1
CM821	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.11773	2012 220nF(224)K 50V	1	0.33484	1
CM822	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.11773	2012 220nF(224)K 50V	1	0.41103	1
C9807	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.11773	2012 220nF(224)K 50V	1	0.40767	1
C9808	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.10603	2012 220nF(224)K 50V	1	0.24867	1

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CP802	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.16436	2012 220nF(224)K 50V	1	0.3471	1
CM810	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.07670	2012 220nF(224)K 50V	1	0.18138	1
CP806	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.07787	2012 100nF(104)K 50V	1	0.21342	1
CP807	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.10017	2012 100nF(104)K 50V	1	0.20101	1
CS805	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.10603	2012 100nF(104)K 50V	1	0.18587	1
CS818	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.02957	2012 100nF(104)K 50V	1	0.20402	1
C9804	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.05316	2012 100nF(104)K 50V	1	0.3155	1
C9835	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.11773	2012 100nF(104)K 50V	1	0.41103	1
C9836	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.12358	2012 100nF(104)K 50V	1	0.4098	1
C9838	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.04137	2012 100nF(104)K 50V	1	0.23413	1
C9842	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.04137	2012 100nF(104)K 50V	1	0.31043	1
C9844	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.04137	2012 100nF(104)K 50V	1	0.17543	1

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
C9850	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.33878 Pi T:1.05905	2012 100nF(104)K 50V	1	0.35879	1
C9851	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.34722 Pi T:1.05905	2012 100nF(104)K 50V	1	0.36772	1
C9852	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.37076 Pi T:1.05905	2012 100nF(104)K 50V	1	0.39265	1
C9853	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.05905	2012 100nF(104)K 50V	1	0.38945	1
C9858	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.05905	2012 100nF(104)K 50V	1	0.38945	1
C9854	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.33327 Pi T:1.05905	2012 10nF(103)J 25V	1	0.35295	1
C9855	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.20713 Pi T:1.05905	2012 10nF(103)J 25V	1	0.21936	1
C9856	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.20376 Pi T:1.05905	2012 10nF(103)J 25V	1	0.2158	1
C9857	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.20713 Pi T:1.05905	2012 10nF(103)J 25V	1	0.21936	1
C9837	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.29080	2012 4.7nF(472)J 25V	1	0.25557	1
C9841	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.02366	2012 4.7nF(472)J 25V	1	0.18703	1
C9843	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.08257	2012 4.7nF(472)J 25V	1	0.18193	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
C9845	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.08844	2012 4.7nF(472)J 25V	1	0.21569	1
C9859	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19881 Pi T:1.05905	2012 0.47nF(471)K 50V	1	0.21055	1
C9864	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19901 Pi T:1.05905	2012 0.47nF(471)K 50V	1	0.21076	1
C9865	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19873 Pi T:1.05905	2012 0.47nF(471)K 50V	1	0.21046	1
C9866	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19876 Pi T:1.05905	2012 0.47nF(471)K 50V	1	0.2105	1
CM805	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.09548	1608 22nF(223)K 50V	1	0.32818	1
CM814	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.05905	1608 22nF(223)K 50V	1	0.38945	1
CP808	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.02248	1608 2.2nF(222)K 50V	1	0.37293	1
CS815	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.02366	1608 220pF(221)J 50V	1	0.23015	1
CS807	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.05198	1608 100nF(104)K 50V	1	0.17722	1
CS814	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.04609	1608 100nF(104)K 50V	1	0.20712	1
CM811	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.05198	1608 100nF(104)K 50V	1	0.19221	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CM813	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.08844	1608 100nF(104)K 50V	1	0.18291	1
CM817	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.09548	1608 100nF(104)K 50V	1	0.21708	1
CM823	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.05905	1608 100nF(104)K 50V	1	0.31726	1
C9800	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.16377	1608 100nF(104)K 50V	1	0.42796	1
C9801	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.09490	1608 100nF(104)K 50V	1	0.39934	1
C9803	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.10603	1608 100nF(104)K 50V	1	0.24867	1
C9839	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.15273	1608 100nF(104)K 50V	1	0.34363	1
CP804	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.10603	1608 10nF(103)K 50V	1	0.18633	1
CS806	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.09431	1608 10nF(103)K 50V	1	0.21667	1
CS816	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.33041	1608 10nF(103)K 50V	1	0.24308	1
CM824	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.12942	1608 10nF(103)K 50V	1	0.1898	1
C9809	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.12358	1608 10nF(103)K 50V	1	0.22265	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
C9810	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.05905	1608 10nF(103)K 50V	1	0.31726	1
C9819	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.09431	1608 10nF(103)K 50V	1	0.40241	1
C9820	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.02957	1608 10nF(103)K 50V	1	0.37551	1
C9823	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.00592	1608 10nF(103)K 50V	1	0.22616	1
C9824	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.24915	1608 10nF(103)K 50V	1	0.37237	1
CP805	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.11773	1608 1nF(102)J 50V	1	0.1883	1
CQ802	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.11773	1608 1nF(102)J 50V	1	0.22131	1
C9805	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.11773	1608 1nF(102)J 50V	1	0.20422	1
C9806	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.10603	1608 1nF(102)J 50V	1	0.18587	1
C9811	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.16436	1608 1nF(102)J 50V	1	0.23073	1
C9812	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.07670	1608 1nF(102)J 50V	1	0.32255	1
C9813	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.07787	1608 1nF(102)J 50V	1	0.39637	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
C9814	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.10017	1608 1nF(102)J 50V	1	0.40127	1
C9821	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.10603	1608 1nF(102)J 50V	1	0.24867	1
C9822	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.02957	1608 1nF(102)J 50V	1	0.30692	1
C9825	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.05316	1608 1nF(102)J 50V	1	0.17742	1
C9826	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.11773	1608 1nF(102)J 50V	1	0.22131	1
C9829	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.12358	1608 1nF(102)J 50V	1	0.20529	1
C9830	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.04137	1608 1nF(102)J 50V	1	0.175	1
C9833	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.04137	1608 1nF(102)J 50V	1	0.20636	1
C9834	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29957 Pi T:1.04137	1608 1nF(102)J 50V	1	0.31197	1
CP814	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36773 Pi T:1.29080	1608 470pF(471)J 50V	1	0.47467	1
C9815	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.36473 Pi T:1.02366	1608 330pF(331)J 50V	1	0.37336	1
C9816	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.22483 Pi T:1.08257	1608 330pF(331)J 50V	1	0.2434	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
C9827	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.29810 Pi T:1.08844	1608 330pF(331)J 50V	1	0.32447	1
C9828	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16846 Pi T:1.09548	1608 330pF(331)J 50V	1	0.18455	1
C9860	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19800 Pi T:1.05905	1608 100pF(101)J 50V	1	0.20969	1
C9861	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.18271 Pi T:1.02248	1608 100pF(101)J 50V	1	0.18682	1
C9862	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.16805 Pi T:1.02366	1608 100pF(101)J 50V	1	0.17202	1
C9863	Capacitor	Lamda G:1 Pi Q:1.00000 Pi S:0.19816 Pi T:1.04609	1608 100pF(101)J 50V	1	0.20729	1
VR9800	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.54337 Pi T:1.20774	1/2W 20KΩ TOP	1	0.32813	1
RS802	Resistor	Lamda G:3 Pi Q:1.00000 Pi S:0.76890 Pi T:1.17596	2W 100KΩ J AXIAL	1	2.71257	1
RS804	Resistor	Lamda G:3 Pi Q:1.00000 Pi S:0.86071 Pi T:1.08844	2W 100KΩ J AXIAL	1	2.8105	1
RM838	Resistor	Lamda G:3 Pi Q:1.00000 Pi S:0.74123 Pi T:1.18176	2W 47KΩ J AXIAL	1	2.62787	1
RP817	Resistor	Lamda G:3 Pi Q:1.00000 Pi S:0.75314 Pi T:1.18176	2W 4.7Ω J AXIAL	1	2.67007	1
R9879	Resistor	Lamda G:16 Pi Q:1.00000 Pi S:0.71645 Pi T:1.56468	2W 3.3Ω F AXIAL	1	17.93614	0.9998

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9880	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.96865 Pi T:1.18782	2W 3.3Ω F AXIAL	1	0.57529	1
R9888	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.53318 Pi T:1.18782	2W 3.3Ω F AXIAL	1	0.31666	1
R9889	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.53049 Pi T:1.18782	2W 3.3Ω F AXIAL	1	0.31507	1
RS805	Resistor	Lamda G:16 Pi Q:1.00000 Pi S:0.52268 Pi T:1.56468	2W 0.51Ω J AXIAL	1	13.08522	0.9999
R9842	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.53076 Pi T:1.18782	2W 0.12Ω J AXIAL	1	0.31522	1
R9843	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.54104 Pi T:1.18782	2W 0.12Ω J AXIAL	1	0.32133	1
R9863	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.71645 Pi T:1.18782	2W 0.12Ω J AXIAL	1	0.42551	1
R9864	Resistor	Lamda G:16 Pi Q:1.00000 Pi S:0.96865 Pi T:1.56468	2W 0.12Ω J AXIAL	1	24.25003	0.9998
RP801	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.52268 Pi T:1.18782	2W 0.12Ω J AXIAL	1	0.31043	1
RP802	Resistor	Lamda G:16 Pi Q:1.00000 Pi S:0.53076 Pi T:1.56468	2W 0.12Ω J AXIAL	1	13.28738	0.9999
RP823	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56440 Pi T:1.20774	1/4W 2MΩ F 3216	1	0.34082	1
RP824	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59144 Pi T:1.16812	1/4W 2MΩ F 3216	1	0.34543	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RP825	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58441 Pi T:1.18782	1/4W 2MΩ F 3216	1	0.34709	1
RP826	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58453 Pi T:1.12932	1/4W 2MΩ F 3216	1	0.33006	1
RP829	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.01414 Pi T:1.20774	1/4W 2MΩ F 3216	1	0.61241	1
RP830	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99844 Pi T:1.18782	1/4W 2MΩ F 3216	1	0.59299	1
RP831	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99896 Pi T:1.20774	1/4W 2MΩ F 3216	1	0.60324	1
RP832	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.85765 Pi T:1.12740	1/4W 2MΩ F 3216	1	0.48346	1
RS810	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58441 Pi T:1.18782	1/4W 1MΩ F 3216	1	0.34709	1
RS811	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58462 Pi T:1.18782	1/4W 1MΩ F 3216	1	0.34721	1
RS812	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59041 Pi T:1.02868	1/4W 1MΩ F 3216	1	0.30367	1
RS813	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58453 Pi T:1.18782	1/4W 1MΩ F 3216	1	0.34716	1
RX801S	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.01414 Pi T:1.18782	1/4W 470kΩ J 3216	1	0.60231	1
RX802S	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99844 Pi T:1.55503	1/4W 470kΩ J 3216	1	0.7763	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RX803S	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99896 Pi T:1.53173	1/4W 470kΩ J 3216	1	0.76507	1
RX804S	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.85765 Pi T:1.55503	1/4W 470kΩ J 3216	1	0.66684	1
R9827	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58441 Pi T:1.54335	1/4W 220kΩ F 3216	1	0.45097	1
R9845	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58462 Pi T:1.55503	1/4W 220kΩ F 3216	1	0.45455	1
R9846	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59041 Pi T:1.53173	1/4W 220kΩ F 3216	1	0.45218	1
R9848	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58453 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.34716	1
R9849	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.01414 Pi T:1.79989	1/4W 220kΩ F 3216	1	0.91267	1
R9868	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99844 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.59299	1
R9869	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99896 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.59329	1
R9871	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.85765 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.50937	1
R9872	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58441 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.34709	1
R9927	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58462 Pi T:1.18782	1/4W 220kΩ F 3216	1	0.34721	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9912	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99688 Pi T:1.18782	1/4W 1kΩ F 3216	1	0.59206	1
R9913	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.03223 Pi T:1.18782	1/4W 1kΩ F 3216	1	0.61305	1
R9914	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.98345 Pi T:1.18782	1/4W 1kΩ F 3216	1	0.58408	1
R9915	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.03340 Pi T:1.18782	1/4W 1kΩ F 3216	1	0.61375	1
RP803	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59041 Pi T:1.18782	1/4W 47Ω F 3216	1	0.35065	1
RM822	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58453 Pi T:1.18782	1/4W 47Ω F 3216	1	0.34716	1
RM823	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.01414 Pi T:1.18782	1/4W 47Ω F 3216	1	0.60231	1
RM824	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99844 Pi T:1.18782	1/4W 47Ω F 3216	1	0.59299	1
RM827	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.99896 Pi T:1.18782	1/4W 47Ω F 3216	1	0.59329	1
RS803	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.85765 Pi T:1.18782	1/4W 1.2Ω J 3216	1	0.50937	1
RS828	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.58441 Pi T:1.18782	1/4W 1.2Ω J 3216	1	0.34709	1
RS814	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.47698 Pi T:1.18782	1/8W 120KΩ F 2012	1	0.8772	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RM807	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.53718 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.31903	1
RM808	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.55270 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.32826	1
RM809	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.67837 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.40289	1
RM810	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.92371 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.5486	1
RM811	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.92295 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.54815	1
RM812	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.53623 Pi T:1.18782	1/8W 22KΩ F 2012	1	0.31847	1
RP812	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.67685 Pi T:1.18782	1/8W 10KΩ F 2012	1	0.40199	1
RP813	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.55276 Pi T:1.18782	1/8W 10KΩ F 2012	1	0.32829	1
RM819	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:94.63241 Pi T:1.18782	1/8W 10KΩ F 2012	1	56.20328	0.9995
RM820	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:94.63241 Pi T:1.18782	1/8W 10KΩ F 2012	1	56.20328	0.9995
RM860	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:94.63241 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	56.20328	0.9995
RM861	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59259 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	0.35195	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RM862	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.65319 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	0.38793	1
RM863	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69488 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	0.4127	1
RM864	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.05872 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	0.62879	1
RM865	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.30352 Pi T:1.18782	1/8W 3.3kΩ J 2012	1	0.77417	1
R9816	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.92484 Pi T:1.18782	1/8W 2KΩ F 2012	1	0.54927	1
RS807	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.87250 Pi T:1.18782	1/4W 1KΩ F 3216	1	0.51819	1
RS809	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.55899 Pi T:1.18782	1/8W 910Ω F 2012	1	0.33199	1
RS825	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59259 Pi T:1.18782	1/8W 910Ω F 2012	1	0.35195	1
RS815	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.65319 Pi T:1.18782	1/8W 330Ω F 2012	1	0.38793	1
RS819	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69488 Pi T:1.18782	1/8W 330Ω F 2012	1	0.4127	1
RP808	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74344 Pi T:1.18782	1/4W 100Ω F 3216	1	0.44154	1
RP809	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.82492 Pi T:1.18782	1/4W 100Ω F 3216	1	0.48993	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9850	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.92484 Pi T:1.18782	1/8W 100Ω F 2012	1	0.54927	1
RS820	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.45821 Pi T:1.18782	1/8W 68Ω F 2012	1	0.86605	1
RM816	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.55899 Pi T:1.18782	1/8W 47Ω F 2012	1	0.33199	1
RM817	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59259 Pi T:1.18782	1/8W 47Ω F 2012	1	0.35195	1
RP814	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.65319 Pi T:1.18782	1/8W 47Ω F 2012	1	0.38793	1
RP815	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69488 Pi T:1.18782	1/8W 22Ω F 2012	1	0.4127	1
RM813	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.05872 Pi T:1.18782	1/8W 22Ω F 2012	1	0.62879	1
RM814	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.30352 Pi T:1.18782	1/8W 22Ω F 2012	1	0.77417	1
RM815	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.92484 Pi T:1.18782	1/8W 22Ω F 2012	1	0.54927	1
RP806	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.45821 Pi T:1.18782	1/8W 10Ω F 2012	1	0.86605	1
RP807	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.55899 Pi T:1.18782	1/8W 10Ω F 2012	1	0.33199	1
RP810	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.59259 Pi T:1.18782	1/8W 10Ω F 2012	1	0.35195	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RP811	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.65319 Pi T:1.18782	1/8W 10Ω F 2012	1	0.38793	1
RM805	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 1.2MΩ F 1608	1	0.44329	1
RQ835	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 1MΩ F 1608	1	0.75037	1
RM842	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 1MΩ F 1608	1	0.97317	1
RM846	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 1MΩ F 1608	1	0.63369	1
RM847	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 1MΩ F 1608	1	1.11962	1
R9825	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 1MΩ F 1608	1	0.33772	1
RM804	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 680KΩ F 1608	1	0.36328	1
RQ827	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 470KΩ F 1608	1	0.41029	1
R9815	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 470KΩ F 1608	1	0.44329	1
RP833	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/8W 220KΩ F 2012	1	0.75037	1
RP827	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 180KΩ F 1608	1	0.97317	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RS821	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 150KΩ F 1608	1	0.63369	1
RS823	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 150KΩ F 1608	1	1.11962	1
RS806	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.33772	1
RS826	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.36328	1
RM844	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.41029	1
RM845	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.44329	1
R9877	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.75037	1
R9886	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 100KΩ F 1608	1	0.97317	1
R9887	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.00005	1/10W 100KΩ F 1608	1	0.53352	1
RP805	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 68KΩ F 1608	1	1.11962	1
RP828	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 68KΩ F 1608	1	0.33772	1
RP834	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 68KΩ F 1608	1	0.36328	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RP804	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 51KΩ F 1608	1	0.41029	1
R9826	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 47KΩ F 1608	1	0.44329	1
RS827	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 43KΩ F 1608	1	0.75037	1
RM801	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 27KΩ F 1608	1	0.97317	1
R9830	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 27KΩ F 1608	1	0.63369	1
R9831	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 27KΩ F 1608	1	1.11962	1
R9857	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 27KΩ F 1608	1	0.33772	1
R9858	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 27KΩ F 1608	1	0.36328	1
RS818	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 24KΩ F 1608	1	0.41029	1
R9821	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 18KΩ F 1608	1	0.44329	1
RS801	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 20KΩ F 1608	1	0.75037	1
RS817	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 20KΩ F 1608	1	0.97317	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RS822	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 20KΩ F 1608	1	0.63369	1
R9807	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 20KΩ F 1608	1	1.11962	1
R9802	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 20KΩ F 1608	1	0.33772	1
R9800	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 12KΩ F 1608	1	0.36328	1
R9853	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 18KΩ F 1608	1	0.41029	1
R9895	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 18KΩ F 1608	1	0.44329	1
R9897	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 18KΩ F 1608	1	0.75037	1
R9899	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 18KΩ F 1608	1	0.97317	1
R9992	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.63369	1
R9993	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 12KΩ F 1608	1	1.11962	1
RQ802	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.33772	1
RM826	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.36328	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RM828	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.41029	1
R9805	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.44329	1
R9806	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.75037	1
R9808	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.97317	1
R9809	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.63369	1
R9812	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 10KΩ F 1608	1	1.11962	1
R9822	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.33772	1
R9836	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.36328	1
R9837	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.41029	1
R9861	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.44329	1
R9862	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.20774	1/10W 10KΩ F 1608	1	0.76295	1
R9862	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.09669 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.65134	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9904	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.16812	1/10W 10KΩ F 1608	1	0.95703	1
R9905	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.63369	1
R9908	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.12932	1/10W 10KΩ F 1608	1	1.06447	1
R9910	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.20774	1/10W 10KΩ F 1608	1	0.34338	1
R9801	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 10KΩ F 1608	1	0.36328	1
R9804	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.20774	1/10W 3KΩ F 1608	1	0.41717	1
RM806	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.12740	1/10W 6.8KΩ F 1608	1	0.42074	1
RM830	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 5.6KΩ F 1608	1	0.75037	1
RM831	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 5.6KΩ F 1608	1	0.97317	1
R9844	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.02868	1/10W 5.6KΩ F 1608	1	0.54879	1
R9847	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 5.6KΩ F 1608	1	1.11962	1
R9867	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 5.6KΩ F 1608	1	0.33772	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9870	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.55503	1/10W 5.6KΩ F 1608	1	0.47558	1
RQ801	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.53173	1/10W 4.7KΩ F 1608	1	0.52908	1
RS816	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.55503	1/10W 4.7KΩ F 1608	1	0.58033	1
R9851	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.54335	1/10W 4.7KΩ F 1608	1	0.97496	1
R9852	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.55503	1/10W 4.7KΩ F 1608	1	1.27402	1
R9866	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.53173	1/10W 4.7KΩ F 1608	1	0.81716	1
R9874	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 4.7KΩ F 1608	1	1.11962	1
R9882	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.79989	1/10W 4.7KΩ F 1608	1	0.51173	1
R9883	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 4.7KΩ F 1608	1	0.36328	1
RM825	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 3.6KΩ F 1608	1	0.41029	1
RM802	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 2.7KΩ F 1608	1	0.44329	1
RM832	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 2.7KΩ F 1608	1	0.75037	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
RM829	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 1.6KΩ F 1608	1	0.97317	1
R9811	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 2KΩ F 1608	1	0.63369	1
R9982	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 2KΩ F 1608	1	1.11962	1
R9824	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 1.5KΩ F 1608	1	0.33772	1
R9875	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 1.3KΩ F 1608	1	0.36328	1
R9876	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 1.3KΩ F 1608	1	0.41029	1
R9884	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 1.3KΩ F 1608	1	0.44329	1
R9885	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 1.3KΩ F 1608	1	0.75037	1
RQ803	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.97317	1
RM821	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.63369	1
RM834	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 1KΩ F 1608	1	1.11962	1
R9810	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.33772	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9823	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.36328	1
R9828	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.41029	1
R9829	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.44329	1
R9834	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.75037	1
R9835	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.97317	1
R9838	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.63369	1
R9839	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.87250 Pi T:1.18782	1/4W 1KΩ F 3216	1	0.51819	1
R9840	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.33772	1
R9841	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.36328	1
R9859	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.41029	1
R9860	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.44329	1
R9865	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.75037	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9873	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.97317	1
R9881	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.63369	1
R9891	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 1KΩ F 1608	1	1.11962	1
R9892	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.33772	1
R9935	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.36328	1
RQ804	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.41029	1
RM803	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 820Ω F 1608	1	0.44329	1
R9890	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 910Ω F 1608	1	0.75037	1
R9894	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 910Ω F 1608	1	0.97317	1
R9902	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 1KΩ F 1608	1	0.63369	1
R9903	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 910Ω F 1608	1	1.11962	1
R9817	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 750Ω F 1608	1	0.36328	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
R9818	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 750Ω F 1608	1	0.41029	1
R9819	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 750Ω F 1608	1	0.44329	1
R9820	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 750Ω F 1608	1	0.75037	1
R9813	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 510Ω F 1608	1	0.97317	1
R9901	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 510Ω F 1608	1	0.63369	1
R9951	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 470Ω F 1608	1	1.11962	1
R9981	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 470Ω F 1608	1	0.33772	1
R9900	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 510Ω F 1608	1	0.36328	1
R9814	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 510Ω F 1608	1	0.41029	1
RS808	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/8W 220Ω F 2012	1	0.44329	1
R9854	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 47Ω F 1608	1	0.75037	1
R9918	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 47Ω F 1608	1	0.97317	1

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R9933	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 47Ω F 1608	1	0.63369	1
R9934	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.88516 Pi T:1.18782	1/10W 47Ω F 1608	1	1.11962	1
R9994	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.56863 Pi T:1.18782	1/10W 22Ω F 1608	1	0.33772	1
R9995	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.61167 Pi T:1.18782	1/10W 22Ω F 1608	1	0.36328	1
RS824	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.69083 Pi T:1.18782	1/10W 20Ω F 1608	1	0.41029	1
R9832	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:0.74639 Pi T:1.18782	1/10W 100Ω F 1608	1	0.44329	1
R9833	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.26343 Pi T:1.18782	1/10W 100Ω F 1608	1	0.75037	1
R9855	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.63858 Pi T:1.18782	1/10W 100Ω F 1608	1	0.97317	1
R9856	Resistor	Lamda G:0.5 Pi Q:1.00000 Pi S:1.06698 Pi T:1.18782	1/10W 100Ω F 1608	1	0.63369	1
BD801S	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.44293 Pi T:1.26527	600V 15A D15XB60	1	3.36259	1
DM811	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.43128 Pi T:2.57125	300V 10A SFF1005GA	1	6.65355	0.9999
DM814	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.45703 Pi T:2.61869	300V 10A SFF1005G	1	7.18096	0.9999

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DP804	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.40902 Pi T:1.26838	600V 9A BYV29FX-600	1	3.11273	1
DS812	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.59126 Pi T:1.28717	100V 20A FMEN-220A	1	2.28316	1
DM810	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.39673 Pi T:1.28717	100V 20A FMEN-220A	1	1.53198	1
DM813	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.39353 Pi T:1.28717	100V 20A FMEN-220A	1	1.51962	1
D9809	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.61201 Pi T:1.81151	400V 2A SF26G	1	6.65202	0.9999
D9812	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.55627 Pi T:2.11674	400V 2A SF26G	1	7.06487	0.9999
D9813	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.57666 Pi T:1.21023	400V 2A SF26G	1	4.18736	1
D9818	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.70751 Pi T:1.20423	400V 2A SF26G	1	5.11204	1
DS806	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.00000 Pi T:1.10275	1000V 1A 1N4007S	1	6.6165	0.9999
DS814	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.00000 Pi T:1.10275	1000V 1A 1N4007S	1	6.6165	0.9999
DS815	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.00000 Pi T:2.27070	1000V 1A 1N4007S	1	13.62418	0.9999
DS804	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.61672 Pi T:2.27070	1000V 1.5A FR157G	1	8.40236	0.9999

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
DS808	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.61672 Pi T:1.28717	1000V 1.5A FR157G	1	4.76297	1
DS807	Diode	Lamda G:3 Pi Q:1.00000 Pi S:1.00000 Pi T:1.19229	1000V 1A UF4007	1	3.57687	1
DP801	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.27381 Pi T:1.28717	1000V 3A 1N5408-09	1	2.11461	1
DP805	Diode	Lamda G:6 Pi Q:1.00000 Pi S:0.27381 Pi T:1.28717	1000V 3A 1N5408-09	1	2.11461	1
DM815	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.48432 Pi T:1.10837	40V 2A SR24E	1	1.61043	1
DM816	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.48432 Pi T:1.35131	40V 2A SR24E	1	1.96341	1
DS809	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.27117 Pi T:1.28717	30V 0.2A LBAT54ALT1G	1	1.04714	1
DM804	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.34935 Pi T:1.05314	30V 0.2A LBAT54ALT1G	1	1.10373	1
DM805	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.37560 Pi T:1.28717	30V 0.2A LBAT54ALT1G	1	1.45039	1
DS803	Diode	Lamda G:3 Pi Q:1.00000 Pi S:1.56739 Pi T:1.28717	75V 100mA LMBD2838LT1G	1	6.0525	0.9999
DP802	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1
DP803	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
DQ815	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60181 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.32388	1
DQ816	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
DS801	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.34935 Pi T:1.28717	70V 200mA LMDL6050T1G	1	1.34901	1
DS810	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.37560 Pi T:1.28717	70V 200mA LMDL6050T1G	1	1.45039	1
DS813	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1
DM802	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1
DM803	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
DM806	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60181 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.32388	1
DM807	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
DM808	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.34935 Pi T:1.28717	70V 200mA LMDL6050T1G	1	1.34901	1
DM809	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.37560 Pi T:1.28717	70V 200mA LMDL6050T1G	1	1.45039	1
DM817	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1

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Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
DQ811	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1
DQ812	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
DQ813	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60181 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.32388	1
D9801	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	30V 200mA LBAT54CLT1G	1	2.35072	1
D9802	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.34935 Pi T:1.28717	30V 200mA LBAT54CLT1G	1	1.34901	1
D9806	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60635 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34144	1
D9807	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
D9810	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60181 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.32388	1
D9811	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
D9814	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60814 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.34834	1
D9815	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.60876 Pi T:1.28717	70V 200mA LMDL6050T1G	1	2.35072	1
D9816	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.25795 Pi T:1.28717	70V 200mA LMDL6050T1G	1	0.99568	1

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D9817	Diode	Lamda G:3 Pi Q:1.00000 Pi S:0.84887 Pi T:1.28717	70V 200mA LMDL6050T1G	1	3.27792	1
QM801S	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.47951 Pi T:1.66594	500V 8A TK8A50D	1	135.80051	0.9988
QM802S	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.48529 Pi T:2.36788	500V 8A TK8A50D	1	195.35012	0.9983
QP805S	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.38289 Pi T:2.27070	600V 11A MDF11N60	1	147.80374	0.9987
QP806S	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.38780 Pi T:2.27070	600V 11A MDF11N60	1	149.6969	0.9987
Q9805	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.38915 Pi T:1.66976	500V 8A TK8A50D	1	110.46244	0.999
Q9806	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.39574 Pi T:1.66976	500V 8A TK8A50D	1	112.33388	0.999
Q9807	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.35608 Pi T:1.66976	500V 8A TK8A50D	1	101.07628	0.9991
Q9808	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.44646 Pi T:1.66976	500V 8A TK8A50D	1	126.73212	0.9989
Q9809	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.42350 Pi T:1.66976	250V 7.5A KF9N25D	1	120.21425	0.9989
Q9810	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.39598 Pi T:1.66976	250V 7.5A KF9N25D	1	112.4013	0.999
Q9811	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.40076 Pi T:1.66976	250V 7.5A KF9N25D	1	113.75825	0.999

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Q9812	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.39980 Pi T:1.66976	250V 7.5A KF9N25D	1	113.48555	0.999
QM804	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.34370 Pi T:2.78694	40V 35A AOD4186	1	162.83599	0.9986
QQ801	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.35841 Pi T:1.29981	60V 300mA 2N7002K	1	79.19639	0.9993
QS801	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.35841 Pi T:1.29981	60V 300mA 2N7002K	1	79.19639	0.9993
Q9802	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.11813 Pi T:1.25597	50V 100mA KRC101S	1	0.89018	1
Q9813	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.11813 Pi T:1.34479	50V 100mA KRC101S	1	0.95313	1
Q9814	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.11813 Pi T:1.28717	50V 100mA KRC101S	1	0.91229	1
Q9815	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.11813 Pi T:1.25597	50V 100mA KRC101S	1	0.89018	1
Q9816	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.11813 Pi T:1.25597	50V 100mA KRC101S	1	0.89018	1
QS802	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09317 Pi T:1.42118	60V 3A KTD1624	1	0.79446	1
QP801	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09827 Pi T:1.25597	40V 0.6A LMBT2222ALTIG	1	0.74057	1
QP802	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09827 Pi T:1.34479	40V 0.6A LMBT2222ALTIG	1	0.79294	1

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QQ802	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.88538 Pi T:1.28717	60V 300mA 2N7002K	1	193.73774	0.9983
QQ803	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09827 Pi T:1.25597	40V 0.6A LMBT2222ALTIG	1	0.74057	1
Q9801	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09827 Pi T:1.25597	40V 0.6A LMBT2222ALTIG	1	0.74057	1
Q9803	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09827 Pi T:1.25597	40V 0.6A LMBT2222ALTIG	1	0.74057	1
Q9804	Transistor	Lamda G:170 Pi Q:1.00000 Pi S:0.67032 Pi T:1.25597	60V 300mA 2N7002K	1	143.12315	0.9987
QP803	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09569 Pi T:1.28717	60V 0.6A LMBT2907ALTIG	1	0.739	1
QP804	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09569 Pi T:1.28717	60V 0.6A LMBT2907ALTIG	1	0.739	1
QS803	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09569 Pi T:1.28717	60V 0.6A LMBT2907ALTIG	1	0.739	1
Q9800	Transistor	Lamda G:6 Pi Q:1.00000 Pi S:0.09569 Pi T:1.28717	60V 0.6A LMBT2907ALTIG	1	0.739	1
ICP801	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000 Lamda	SPC7011F	1	135.09122	0.9988
ICS801S	IC	G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000 Lamda	STR2A153D	1	116.45256	0.999
ICM801	IC	G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	UCC25600	1	109.92166	0.999

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IC9801	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC5012M	1	109.92166	0.999
IC9802	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC5012M	1	135.09122	0.9988
IC9804	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	42.90417	0.9996
IC9805	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	41.2938	0.9996
IC9806	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	38.73062	0.9997
IC9807	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	46.58914	0.9996
IC9808	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	52.81728	0.9995
IC9809	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	46.00428	0.9996
IC9810	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	53.47959	0.9995
IC9811	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	SLC9012M	1	56.55348	0.9995
IC9800	IC	Lamda G:28.12644 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	AS358MTR-G1	1	135.09122	0.9988
ICS802	IC	Lamda G:22.54615 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	36V 0.1A AS431BNTR-E1	1	37.82098	0.9997

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MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
ICS803	IC	Lamda G:22.54615 Pi Q:1.00000 Pi S:1.00000 Pi T:1.55326	36V 0.1A AS431BNTR-E1	1	35.02217	0.9997
ICM802	IC	Lamda G:22.54615 Pi Q:1.00000 Pi S:1.00000 Pi T:1.62000	36V 0.1A AS431BNTR-E1	1	36.75021	0.9997
IC9803	IC	G:22.54615 Pi Q:1.00000 Pi S:1.00000 Pi T:1.62000	36V 0.1A AS431BNTR-E1	1	36.75021	0.9997
PCS801S	Optical Device	Lamda G:15 Pi Q:1.00000 Pi S:1.00000 Pi T:2.23276	LTV817M-BN	1	33.49136	0.9997
PCS802S	Optical Device	Lamda G:15 Pi Q:1.00000 Pi S:1.00000 Pi T:2.23276	LTV817M-BN	1	33.49136	0.9997
PCM801S	Optical Device	Lamda G:15 Pi Q:1.00000 Pi S:1.00000 Pi T:2.23276	LTV817M-BN	1	33.49136	0.9997
ZDS801	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.87485 Pi T:1.18782	12V 500mW LMSZ5242B	1	20.48887	0.9998
ZDS802	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.94468 Pi T:1.18782	12V 500mW LMSZ5242B	1	20.98655	0.9998
ZDS804	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.61170 Pi T:1.18782	12V 500mW LMSZ5242B	1	18.6134	0.9998
ZDS805	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.31637 Pi T:1.18782	12V 500mW LMSZ5242B	1	16.5086	0.9999
ZD9801	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.94468 Pi T:1.18782	16.80V~19.10V 200mW MM3Z18VT1G	1	20.98655	0.9998
ZD9802	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.94468 Pi T:1.18782	16.80V~19.10V 200mW MM3Z18VT1G	1	20.98655	0.9998

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
ZD9803	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.43333 Pi T:1.18782	16.80V~19.10V 200mW MM3Z18VT1G	1	10.21525	0.9999
ZD9804	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.82212 Pi T:1.18782	16.80V~19.10V 200mW MM3Z18VT1G	1	12.98613	0.9999
ZDQ802	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.45960 Pi T:1.18782	15.30V~17.10V 200mW MM3Z16VT1G	1	17.52944	0.9998
ZDS803	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.18147 Pi T:1.18782	14.70~15.30V 225mW BZX84B15LT1G	1	15.54722	0.9999
ZDM801	Diode	Lamda G:6 Pi Q:1.00000 Pi S:2.18147 Pi T:1.18782	14.30~15.80V 200mW MM3Z15VT1G	1	15.54722	0.9999
ZDQ803	Diode	Lamda G:6 Pi Q:1.00000 Pi S:1.82212 Pi T:1.18782	6.8V 200mW LM3Z6V8	1	12.98613	0.9999
L801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.35301	18PHI 39uH	1	25.7072	0.9998
LX801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.69935	SW05542BH	1	32.28766	0.9997
LX802S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.69935	SW05542BH	1	32.28766	0.9997
L9801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.67476	EE2020	1	31.82039	0.9997
L9802S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.67476	EE2020	1	31.82039	0.9997
L9803S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.67476	EE2020	1	31.82039	0.9997

Reliability Prediction Report

Part Number	
Environment	Ground, Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
L9804S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.67476	EE2020	1	31.82039	0.9997
TM801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.85146	EE1011	1	35.17768	0.9997
TS801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.85146	EE2515W	1	35.17768	0.9997
LP801S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.50864	PQ3813	1	28.66418	0.9997
TM802S	Inductive Device	Lamda G:19 Pi Q:1.00000 Pi S:1.00000 Pi T:1.85146	EE4117	1	35.17768	0.9997
NT801S	Resistor	Lamda G:10 Pi Q:1.00000 Pi S:1.00000 Pi T:5.36523	15Φ 5Ω 25°C	1	53.65232	0.9995
RL801S	Relay	Lamda G:270 Pi Q:1.00000 Pi S:0.53929 Pi T:1.18782	250Vac 5A 5VDC FTR-F3PA005V	1	172.95721	0.9985
FP801S	Miscellaneous	Lamda G:0.5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	250V 5A LEAD TYPE	1	0.5	1
CN801S	Connector	Lamda G:5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.58248	2 PIN INLET 250V 5A	1	7.9124	0.9999
CNM803	Connector	Lamda G:5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.58248	10*2 PIN ANGLE TYPE SIDE LOCKIN	1	7.9124	0.9999
CNL802A	Connector	Lamda G:5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.58248	11*2 PIN STRAIGHT TYPE TOP LOCK	1	7.9124	0.9999
CNL802B	Connector	Lamda G:5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.58248	9*2 PIN STRAIGHT TYPE TOP LOCKI	1	7.9124	0.9999

Reliability Prediction Report

Part Number	
Environment	Ground,Fixed Controlled
Temperature	40

Telcordia SR-332	
Failure Rate	6260.6122
MTBF	159728.7877

Part Number	Category	Pi Factors	Description	Qty	Failure Rate	Reliability
CNL804	Connector	Lamda G:5 Pi Q:1.00000 Pi S:1.00000 Pi T:1.58248	2PIN 2.0mm	1	7.9124	0.9999
PCB	User Defined	Lamda G:0.0015 Pi Q:1.00000 Pi S:1.00000 Pi T:1.00000	FR-1245*2851.6T sectional	1	0.0015	1



SPECIFICATION
PD46B2Q_CDY
(EDGE DATA)

STD RECORD NO.
PAGE PUB. DATE
PAGE REV. DATE

BN44-00522B
2011.12.13
2012.01.13

10. EDGE DATA

■ PFC Block

No.	Key Parts	Edge Sample Value		Key Parts	Edge Sample Value	
		Min	Max		Min	Max
1	Item : Inductor	141		Item : MOSFET	178	176
2		140			179	178
3		142			177	179
4		141			179	175
5		140			177	178
6		140			176	179
7		141			177	177
8		141			175	178
9		140			177	179
10		140			177	175
11	Part Name : PQ3813		161	Part Name : MDF11N60		189 185
12			162			188 188
13			163			191 187
14			163			185 186
15	Vendor : YAO SHENG		161	Vendor : MAGNACHIP		188 188
16			163			187 191
17			160			186 185
18	Edge Item : Lm		163	Edge Item : Coss		189 188
19			163			190 191
20			163			189 190
21	Spec : 150 uF ± 7%			Spec : TYP - 184pF		
22						
23						
24						
25						
26						
27						
28						
29						
30						

■ Main Block

No.	Key Parts	Edge Sample Value		Key Parts	Edge Sample Value		Key Parts	Edge Sample Value	
		Min	Max		Min	Max		Min	Max
1	Item : Photo Coupler Part Name : LTV817M-BN Vendor : LITE-ON Edge Item : CTR Spec : 130% ~ 260%	134.49		Item : Transformer Part Name : EE4117 Vendor : YAO SHENG Edge Item : Lm Spec : 530uH ± 7 %	517.3		Item : MOSFET Part Name : TK8A50D Vendor : TOSHIBA Edge Item : Coss Spec : TYP - 100pF	93.6	93.1
2		133.28			518.6			93.9	94.5
3		132.67			516.4			93.6	93.1
4		133.74			519.1			94	93.7
5		137.7			519.7			93.6	93.5
6		137.1			517.1			93.7	92.9
7		133.04			518.5			94	93.3
8		135.29			521.6			93.3	93.5
9		132.86			520.4			93.4	94.1
10		133.39			518.6			93.1	93.5
11			247.08			549.1	Item : MOSFET	95.6	95.2
12			250.36			557.5		95.1	95.1
13			251.01			557.6		95.4	95.4
14			251.36			553.1	Part Name : TK8A50D	95	95.7
15			251.03			555.7		95.2	95.1
16			246.63			557.1		95.1	95.6
17			245.99			554.5	Vendor : TOSHIBA	95.6	94.9
18			247.61			551.3		95.4	95.2
19			251.09			555.6		95.6	95.8
20			249.36			556.6	Edge Item : Coss	95.3	95.2
21									
22									
23							Spec : TYP - 100pF		
24									
25									
26									
27									
28									
29									
30									

■ STBY Block

No.	Key Parts	Edge Sample Value		Key Parts	Edge Sample Value	
		Min	Max		Min	Max
1	Item : Photo Coupler	134.49		Item : Transformer	516	
2		133.26			517	
3		132.67			516	
4		136.84			514	
5		137.7			519	
6		132.35			519	
7		133.04			517	
8		134.32			516	
9		132.86			516	
10		137.35			514	
11	Part Name : LTV817M-BN		251.09	Part Name : EE2515W		582
12			250.31			580
13			245.99			580
14			251.33			581
15			251.03			581
16	Vendor : LITE-ON		260.3	Vendor : YAO SHENG		580
17			251.01			581
18			252.33			579
19			247.08			580
20	Spec : 130% ~ 260%		249.31			579
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

BN44-00522B

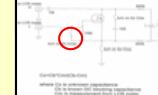
■ LED DRIVE BLOCK

No.	Key Parts	Edge Sample Value				Key Parts	Edge Sample Value				Key Parts	Edge Sample Value			
		Min		Max			Min		Max			Min	Max		
1	Item : Inductor	75	76	75	75	Item : MOSFET	95	92	96	94	Edge Item : Lm				
2		75	75	76	75		94	95	95	95					
3		75	78	76	78		96	96	96	95					
4		76	76	75	76		95	95	92	96					
5		76	75	75	75		94	96	95	95					
6		75	75	76	76		95	92	95	96					
7		75	76	75	75		96	95	94	96					
8		75	75	78	78		97	92	95	95					
9		76	78	76	75		95	95	96	96					
10		75	75	75	76		93	94	97	92					
11	Part Name : EE2020					Part Name : TK8A50D					Edge Item : Coss				
12												105	106		
13												103	103		
14												104	105		
15	Vendor : YAO SHENG					Vendor : TOSHIBA					Spec : TYP - 100pF				
16												103	105		
17												105	104		
18		Edge Item : Lm										104	105		
19	Spec : 80uH ± 7%					Edge Item : Coss									
20												103	104		
21												106	104		
22												104	103		
23															
24												105	105		
25												104	104		
26												106	103		
27												105	104		
28												104	103		
29												106	103		
30												103	102		

PFC MOSFET

품명	MDF11N60																																																																																																																																																																												
Maker	1st	MAGNACHIP																																																																																																																																																																											
	2nd	TOSHIBA																																																																																																																																																																											
적용 DC VSS	PD46B2Q_CDY																																																																																																																																																																												
Location	QP805S, QP806S																																																																																																																																																																												
Edge 항목	Coss	Spec	600V 11A																																																																																																																																																																										
		Typ	184pF																																																																																																																																																																										
		Max	-																																																																																																																																																																										
Datasheet	<table border="1"> <thead> <tr> <th>Characteristics</th> <th>Symbol</th> <th>Test Condition</th> <th>Min</th> <th>Typ</th> <th>Max</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Static Characteristics</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Drain-Source Breakdown Voltage</td> <td>V_{DSS}</td> <td>$I_D = 200\mu A, V_G = 0V$</td> <td>600</td> <td>-</td> <td>-</td> <td>V</td> </tr> <tr> <td>Gate Threshold Voltage</td> <td>$V_{GS(th)}$</td> <td>$V_G = V_{DS}, I_D = 250\mu A$</td> <td>3.0</td> <td>-</td> <td>5.0</td> <td>V</td> </tr> <tr> <td>Drain Cut-Off Current</td> <td>$I_{DS(on)}$</td> <td>$V_G = 0.0V, V_D = 0V$</td> <td>-</td> <td>-</td> <td>1</td> <td>μA</td> </tr> <tr> <td>Gate Leakage Current</td> <td>I_{GS}</td> <td>$V_G = \pm 30V, V_D = 0V$</td> <td>-</td> <td>-</td> <td>100</td> <td>nA</td> </tr> <tr> <td>Output On Resistance</td> <td>$R_{DS(on)}$</td> <td>$V_G = 10V, I_D = 11A$</td> <td>-</td> <td>0.40</td> <td>0.50</td> <td>$m\Omega$</td> </tr> <tr> <td>Forward Transconductance</td> <td>G_f</td> <td>$V_G = 30V, I_D = 5.5A$</td> <td>-</td> <td>1.3</td> <td>-</td> <td>Ω^{-1}</td> </tr> <tr> <td>Dynamic Characteristics</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total Gate Charge</td> <td>Q_G</td> <td></td> <td>-</td> <td>38.4</td> <td>-</td> <td></td> </tr> <tr> <td>Gate-Source Charge</td> <td>Q_{GS}</td> <td>$V_{GS} = 400V, I_D = 11A, V_{DS} = 12V$</td> <td>-</td> <td>11.2</td> <td>-</td> <td>μC</td> </tr> <tr> <td>Gate-Drain Charge</td> <td>Q_{GD}</td> <td></td> <td>-</td> <td>1.8</td> <td>-</td> <td></td> </tr> <tr> <td>Input Capacitance</td> <td>C_{in}</td> <td></td> <td>-</td> <td>1700</td> <td>-</td> <td></td> </tr> <tr> <td>Reverse Transfer Capacitance</td> <td>C_{rr}</td> <td>$V_{GS} = 25V, V_{DS} = 0V, f = 1.0MHz$</td> <td>-</td> <td>6.2</td> <td>-</td> <td>pF</td> </tr> <tr> <td>Output Capacitance</td> <td>C_{os}</td> <td></td> <td>-</td> <td>184</td> <td>-</td> <td></td> </tr> <tr> <td>Turn-On Delay Time</td> <td>t_{on}</td> <td></td> <td>-</td> <td>36</td> <td>-</td> <td></td> </tr> <tr> <td>Turn-Off Delay Time</td> <td>t_{off}</td> <td>$V_G = 10V, V_{DS} = 300V, I_D = 11A$</td> <td>-</td> <td>50</td> <td>-</td> <td>ns</td> </tr> <tr> <td>Fall Time</td> <td>t_f</td> <td>$R_D = 250\Omega$</td> <td>-</td> <td>76</td> <td>-</td> <td></td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>33</td> <td>-</td> <td></td> </tr> <tr> <td>Drain-Source Body Diode Characteristics</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Maximum Continuous Drain-to-Source Forward Current</td> <td>I_S</td> <td></td> <td>-</td> <td>11</td> <td>-</td> <td>A</td> </tr> <tr> <td>Source-Drain Diode Forward Voltage</td> <td>V_{SD}</td> <td>$I_S = 11A, V_G = 0V$</td> <td>-</td> <td>-</td> <td>1.4</td> <td>V</td> </tr> <tr> <td>Body Diode Reverse Recovery Time</td> <td>t_r</td> <td>$I_S = 11A, dI/dt = 100A/\mu s$</td> <td>-</td> <td>430</td> <td>-</td> <td>ns</td> </tr> <tr> <td>Body Diode Reverse Recovery Charge</td> <td>Q_r</td> <td>$I_S = 11A, dI/dt = 100A/\mu s$</td> <td>-</td> <td>4.0</td> <td>-</td> <td>μC</td> </tr> </tbody> </table>					Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit	Static Characteristics							Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 200\mu A, V_G = 0V$	600	-	-	V	Gate Threshold Voltage	$V_{GS(th)}$	$V_G = V_{DS}, I_D = 250\mu A$	3.0	-	5.0	V	Drain Cut-Off Current	$I_{DS(on)}$	$V_G = 0.0V, V_D = 0V$	-	-	1	μA	Gate Leakage Current	I_{GS}	$V_G = \pm 30V, V_D = 0V$	-	-	100	nA	Output On Resistance	$R_{DS(on)}$	$V_G = 10V, I_D = 11A$	-	0.40	0.50	$m\Omega$	Forward Transconductance	G_f	$V_G = 30V, I_D = 5.5A$	-	1.3	-	Ω^{-1}	Dynamic Characteristics							Total Gate Charge	Q_G		-	38.4	-		Gate-Source Charge	Q_{GS}	$V_{GS} = 400V, I_D = 11A, V_{DS} = 12V$	-	11.2	-	μC	Gate-Drain Charge	Q_{GD}		-	1.8	-		Input Capacitance	C_{in}		-	1700	-		Reverse Transfer Capacitance	C_{rr}	$V_{GS} = 25V, V_{DS} = 0V, f = 1.0MHz$	-	6.2	-	pF	Output Capacitance	C_{os}		-	184	-		Turn-On Delay Time	t_{on}		-	36	-		Turn-Off Delay Time	t_{off}	$V_G = 10V, V_{DS} = 300V, I_D = 11A$	-	50	-	ns	Fall Time	t_f	$R_D = 250\Omega$	-	76	-		-	-	-	-	33	-		Drain-Source Body Diode Characteristics							Maximum Continuous Drain-to-Source Forward Current	I_S		-	11	-	A	Source-Drain Diode Forward Voltage	V_{SD}	$I_S = 11A, V_G = 0V$	-	-	1.4	V	Body Diode Reverse Recovery Time	t_r	$I_S = 11A, dI/dt = 100A/\mu s$	-	430	-	ns	Body Diode Reverse Recovery Charge	Q_r	$I_S = 11A, dI/dt = 100A/\mu s$	-	4.0	-	μC
Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit																																																																																																																																																																							
Static Characteristics																																																																																																																																																																													
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 200\mu A, V_G = 0V$	600	-	-	V																																																																																																																																																																							
Gate Threshold Voltage	$V_{GS(th)}$	$V_G = V_{DS}, I_D = 250\mu A$	3.0	-	5.0	V																																																																																																																																																																							
Drain Cut-Off Current	$I_{DS(on)}$	$V_G = 0.0V, V_D = 0V$	-	-	1	μA																																																																																																																																																																							
Gate Leakage Current	I_{GS}	$V_G = \pm 30V, V_D = 0V$	-	-	100	nA																																																																																																																																																																							
Output On Resistance	$R_{DS(on)}$	$V_G = 10V, I_D = 11A$	-	0.40	0.50	$m\Omega$																																																																																																																																																																							
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Dynamic Characteristics																																																																																																																																																																													
Total Gate Charge	Q_G		-	38.4	-																																																																																																																																																																								
Gate-Source Charge	Q_{GS}	$V_{GS} = 400V, I_D = 11A, V_{DS} = 12V$	-	11.2	-	μC																																																																																																																																																																							
Gate-Drain Charge	Q_{GD}		-	1.8	-																																																																																																																																																																								
Input Capacitance	C_{in}		-	1700	-																																																																																																																																																																								
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Output Capacitance	C_{os}		-	184	-																																																																																																																																																																								
Turn-On Delay Time	t_{on}		-	36	-																																																																																																																																																																								
Turn-Off Delay Time	t_{off}	$V_G = 10V, V_{DS} = 300V, I_D = 11A$	-	50	-	ns																																																																																																																																																																							
Fall Time	t_f	$R_D = 250\Omega$	-	76	-																																																																																																																																																																								
-	-	-	-	33	-																																																																																																																																																																								
Drain-Source Body Diode Characteristics																																																																																																																																																																													
Maximum Continuous Drain-to-Source Forward Current	I_S		-	11	-	A																																																																																																																																																																							
Source-Drain Diode Forward Voltage	V_{SD}	$I_S = 11A, V_G = 0V$	-	-	1.4	V																																																																																																																																																																							
Body Diode Reverse Recovery Time	t_r	$I_S = 11A, dI/dt = 100A/\mu s$	-	430	-	ns																																																																																																																																																																							
Body Diode Reverse Recovery Charge	Q_r	$I_S = 11A, dI/dt = 100A/\mu s$	-	4.0	-	μC																																																																																																																																																																							

* Edge 항목 측정 방법

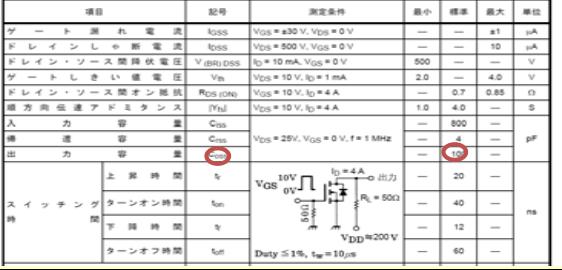
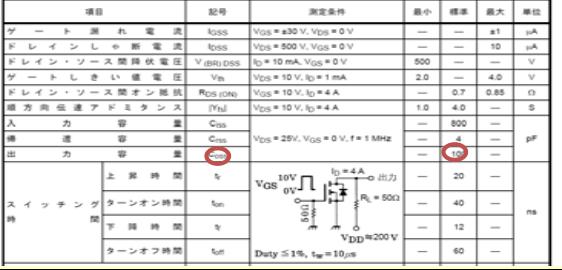
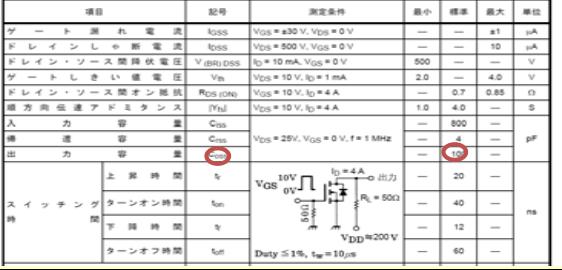
측정 방법	
Internal Bias 사용	
External Bias 사용	

* Test Result

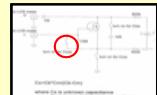
: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	78.4°C	76.3°C
가열 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

MAIN MOSFET

품명	TK8A50D																																																																																																													
Maker	1st	TOSHIBA																																																																																																												
	2nd	MAGNACHIP																																																																																																												
적용 DC VSS	PD46B2Q_CDY																																																																																																													
Location																																																																																																														
	Edge 항목	Spec	500V 8A																																																																																																											
Edge 항목		Typ	100pF																																																																																																											
Datasheet	電気的特性 ($T_a = 25^\circ\text{C}$)																																																																																																													
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ゲートしきい値電圧	V_{th}	$V_{GS} = 10\text{ V}, I_D = 1\text{ mA}$	2.0	—	4.0	V																																																																																																								
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* Edge 항목 측정 방법

측정 방법	
Internal Bias 사용	
External Bias 사용	

* Test Result

: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	68.4°C	67.3°C
가열 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

LED DRIVE MOSFET

품명	TK8A50D																																																																																															
Maker	1st	TOSHIBA																																																																																														
	2nd	MAGNACHIP																																																																																														
적용 DC VSS	PD46B2Q_CDY																																																																																															
Location	Q9805,Q9806,Q9807,Q9808																																																																																															
Edge 항목	Coss	Spec	500V 8A																																																																																													
		Typ	100pF																																																																																													
Datasheet	電気的特性 ($T_a = 25^\circ\text{C}$)																																																																																															
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* Edge 항목 측정 방법



* Test Result

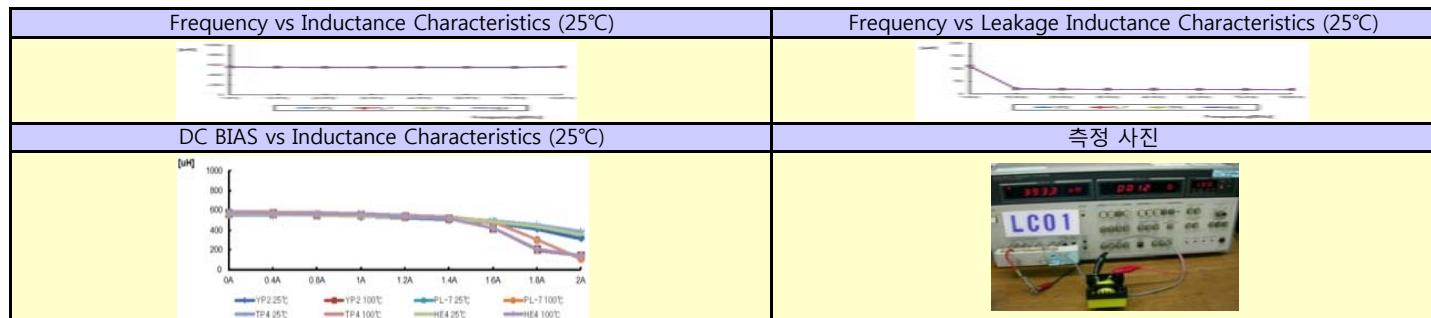
: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	75.8°C	74.3°C
가열 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

STBY Transformer

품명	MQGAH034701																																																			
Maker	1st	YAO SHENG ELECTRONICS																																																		
	2nd	NAMYANG ELECTRONICS																																																		
적용 DC VSS	PD46B2Q_CDY																																																			
Location	TS801S																																																			
Edge 항목	Lm, Lk	Spec	Lm : 550uH ± 7%, Lk : 25uH																																																	
		Max	Lm : 588uH, Lk : 25uH																																																	
		Min	Lm : 511uH																																																	
Datasheet	<table border="1"> <thead> <tr> <th>NO</th> <th>CLOSURE</th> <th>TERMINAL</th> <th>ELECTRICAL CHARACTERISTICS</th> <th>TOLERANCE</th> <th>CONDITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>INDUCTANCE</td> <td>START FINISH</td> <td>5.90 uH</td> <td>± 2%</td> <td></td> </tr> <tr> <td></td> <td></td> <td>6 5</td> <td>32.0 uH</td> <td>± 20%</td> <td></td> </tr> <tr> <td></td> <td></td> <td>9 7</td> <td>5.60 uH</td> <td>± 30%</td> <td></td> </tr> <tr> <td></td> <td></td> <td>5 4</td> <td>5.90 uH</td> <td>± 30%</td> <td></td> </tr> <tr> <td>2</td> <td>LEAKAGE INDUCTANCE (SECONDARY ALL SHORTED)</td> <td>1 - 3 (6 - 5 SHORTED) (9 - 7 SHORTED) (5 - 4 SHORTED)</td> <td>25.0 uH 24.5 uH 17.0 uH 28.5 uH</td> <td>± 20%</td> <td>HPI-4284A, LCR-METER at 1000 Hz, + 0.1Vrms</td> </tr> <tr> <td>3</td> <td>DC RESISTANCE</td> <td>1 3</td> <td>0.800 Ω</td> <td>MAX</td> <td>DC MILLI-OHM METER GOM-802</td> </tr> <tr> <td>4</td> <td>DC CURRENT OVERLAP</td> <td>6 5 9 7 5 4</td> <td>0.500 0.022 0.200</td> <td>MAX</td> <td>at 1000Hz, 1Vrms WITH <1.4A DC</td> </tr> </tbody> </table>				NO	CLOSURE	TERMINAL	ELECTRICAL CHARACTERISTICS	TOLERANCE	CONDITION	1	INDUCTANCE	START FINISH	5.90 uH	± 2%				6 5	32.0 uH	± 20%				9 7	5.60 uH	± 30%				5 4	5.90 uH	± 30%		2	LEAKAGE INDUCTANCE (SECONDARY ALL SHORTED)	1 - 3 (6 - 5 SHORTED) (9 - 7 SHORTED) (5 - 4 SHORTED)	25.0 uH 24.5 uH 17.0 uH 28.5 uH	± 20%	HPI-4284A, LCR-METER at 1000 Hz, + 0.1Vrms	3	DC RESISTANCE	1 3	0.800 Ω	MAX	DC MILLI-OHM METER GOM-802	4	DC CURRENT OVERLAP	6 5 9 7 5 4	0.500 0.022 0.200	MAX	at 1000Hz, 1Vrms WITH <1.4A DC
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* Edge 항목 측정 방법



* Test Result

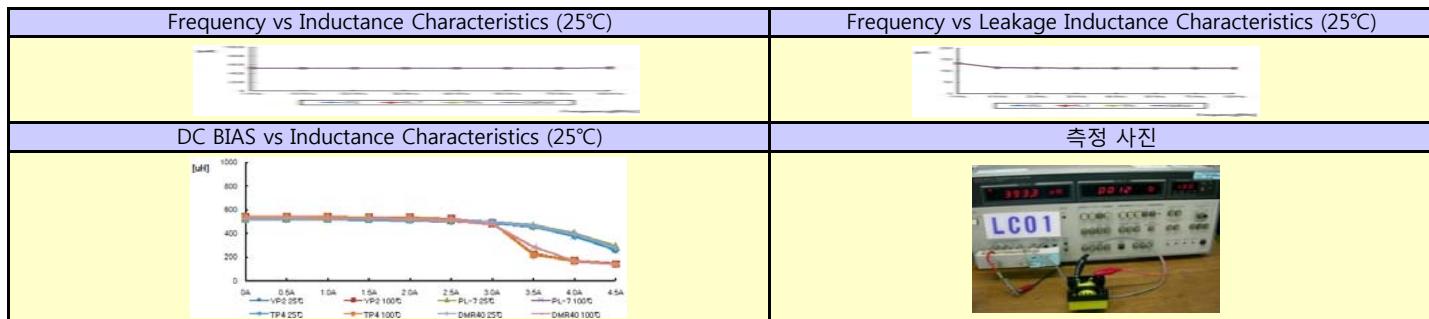
: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 평정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	78.7°C	76.3°C
가혹 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

MAIN Transformer

품명	MQGAH034681																																																																																																																		
Maker	1st	YAO SHENG ELECTRONICS																																																																																																																	
	2nd	NAMYANG ELECTRONICS																																																																																																																	
작용 DC VSS	PD46B2Q_CDY																																																																																																																		
Location	TM802S		Spec																																																																																																																
	Lm, Lk	Max	Lm : 567.1uH, Lk : 120uH																																																																																																																
		Min	Lm : 511.5uH																																																																																																																
Datasheet	<table border="1"> <thead> <tr> <th>Ref</th> <th>CLOSURE</th> <th>TERMINAL</th> <th>ELECTRICAL CHARACTERISTICS</th> <th>TOLERANCE</th> <th>CONDITION</th> </tr> <tr> <th></th> <th></th> <th>START</th> <th>FINISH</th> <th>UNIT</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>INDUCTANCE</td> <td>1</td> <td>6</td> <td>630</td> <td>uH</td> <td>$\pm 7\%$</td> </tr> <tr> <td></td> <td></td> <td>8</td> <td>13</td> <td>38.5</td> <td>uH</td> <td>$\pm 20\%$</td> </tr> <tr> <td></td> <td></td> <td>10</td> <td>14</td> <td>1.945</td> <td>uH</td> <td>MAX.</td> </tr> <tr> <td></td> <td></td> <td>9</td> <td>11</td> <td>2.040</td> <td>uH</td> <td>MIN.</td> </tr> <tr> <td>2</td> <td>LEAKAGE INDUCTANCE (SECONDARY ALL SHORTED)</td> <td>1 - 6</td> <td>1 - 6</td> <td>1.20</td> <td>uH</td> <td>$\pm 15\%$</td> </tr> <tr> <td></td> <td>(8 - 13 SHORTED)</td> <td>8 - 13</td> <td>8 - 13</td> <td>1.30</td> <td>uH</td> <td>$\pm 10\%$</td> </tr> <tr> <td></td> <td>(10 - 14 SHORTED)</td> <td>10 - 14</td> <td>10 - 14</td> <td>1.50</td> <td>uH</td> <td>$\pm 10\%$</td> </tr> <tr> <td></td> <td>(9 - 11 SHORTED)</td> <td>9 - 11</td> <td>9 - 11</td> <td>1.50</td> <td>uH</td> <td>$\pm 10\%$</td> </tr> <tr> <td>3</td> <td>DC RESISTANCE</td> <td>1</td> <td>6</td> <td>0.800</td> <td>Ω</td> <td>MAX.</td> </tr> <tr> <td></td> <td></td> <td>8</td> <td>13</td> <td>0.140</td> <td>Ω</td> <td>DC MILLI-OHM METER GOM-B02</td> </tr> <tr> <td></td> <td></td> <td>10</td> <td>14</td> <td>0.030</td> <td>Ω</td> <td>MAX.</td> </tr> <tr> <td></td> <td></td> <td>9</td> <td>11</td> <td>0.030</td> <td>Ω</td> <td>MAX.</td> </tr> <tr> <td>4</td> <td>DC CURRENT OVERLAP</td> <td>1</td> <td>6</td> <td>4.20</td> <td>mA</td> <td>MIN.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>at 100kHz 1Vrms WITH 0.01ΩDC</td> </tr> </tbody> </table>					Ref	CLOSURE	TERMINAL	ELECTRICAL CHARACTERISTICS	TOLERANCE	CONDITION			START	FINISH	UNIT		1	INDUCTANCE	1	6	630	uH	$\pm 7\%$			8	13	38.5	uH	$\pm 20\%$			10	14	1.945	uH	MAX.			9	11	2.040	uH	MIN.	2	LEAKAGE INDUCTANCE (SECONDARY ALL SHORTED)	1 - 6	1 - 6	1.20	uH	$\pm 15\%$		(8 - 13 SHORTED)	8 - 13	8 - 13	1.30	uH	$\pm 10\%$		(10 - 14 SHORTED)	10 - 14	10 - 14	1.50	uH	$\pm 10\%$		(9 - 11 SHORTED)	9 - 11	9 - 11	1.50	uH	$\pm 10\%$	3	DC RESISTANCE	1	6	0.800	Ω	MAX.			8	13	0.140	Ω	DC MILLI-OHM METER GOM-B02			10	14	0.030	Ω	MAX.			9	11	0.030	Ω	MAX.	4	DC CURRENT OVERLAP	1	6	4.20	mA	MIN.							at 100kHz 1Vrms WITH 0.01ΩDC
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* Edge 항목 측정 방법



* Test Result

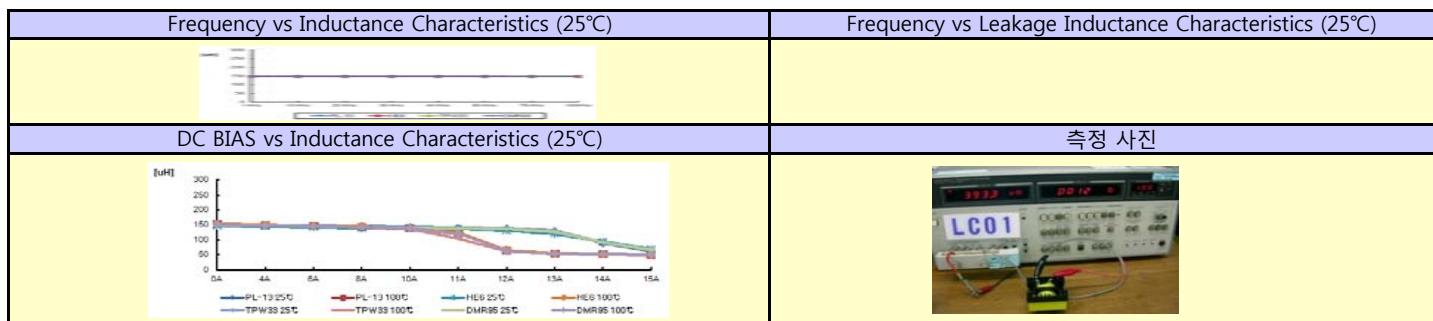
: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	79.8°C	79.1°C
가혹 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

PFC INDUCTOR

품명	MQHAD013321																															
Maker	1st	YAO SHENG ELECTRONICS																														
	2nd	NAMYANG ELECTRONICS																														
적용 DC VSS	PD46B2Q_CDY																															
Location	LP801S																															
Edge 항목	Lm, Lk	Spec	Lm : 150uH ± 7%																													
		Max	Lm : 139uH																													
		Min	Lm : 160uH																													
Datasheet	<table border="1"> <thead> <tr> <th>No</th> <th>CLOSURE</th> <th>TERMINAL START</th> <th>TERMINAL FINISH</th> <th>ELECTRICAL CHARACTERISTICS</th> <th>TOLERANCE</th> <th>CONDITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>INDUCTANCE</td> <td>4</td> <td>1</td> <td>150 uH</td> <td>± 7%</td> <td>HP-4284A LCR-METER at 100KHz, 1Vrms (25°C)</td> </tr> <tr> <td>2</td> <td>DC RESISTANCE</td> <td>4</td> <td>1</td> <td>0..300 Ω</td> <td>MAX</td> <td>CH2102A at 25°C ZENTECH=132Ω at 100kHz, 1Vrms WITH 11A DC</td> </tr> <tr> <td>3</td> <td>DC CURRENT OVERLAP</td> <td>4</td> <td>1</td> <td>120 uH</td> <td>MIN</td> <td></td> </tr> </tbody> </table>				No	CLOSURE	TERMINAL START	TERMINAL FINISH	ELECTRICAL CHARACTERISTICS	TOLERANCE	CONDITION	1	INDUCTANCE	4	1	150 uH	± 7%	HP-4284A LCR-METER at 100KHz, 1Vrms (25°C)	2	DC RESISTANCE	4	1	0..300 Ω	MAX	CH2102A at 25°C ZENTECH=132Ω at 100kHz, 1Vrms WITH 11A DC	3	DC CURRENT OVERLAP	4	1	120 uH	MIN	
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* Edge 항목 측정 방법



* Test Result

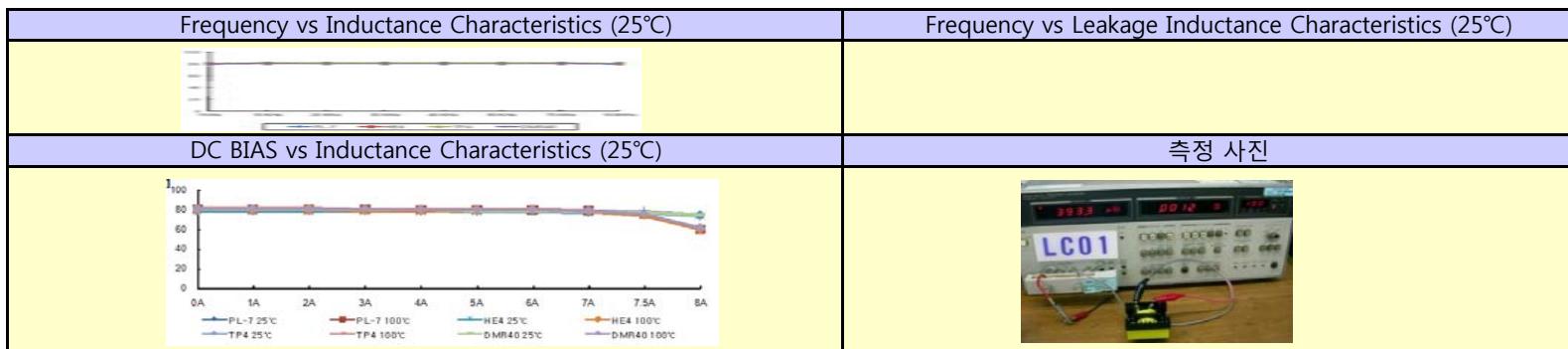
: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	75.6°C	74.9°C
가혹 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

LED INDUCTOR

품명	MQHAD013361																																																					
Maker	1st	YAO SHENG ELECTRONICS																																																				
	2nd	NAMYANG ELECTRONICS																																																				
적용 DC VSS	PD46B2Q_CDY																																																					
Location	L9801S, L9802S, L9803S, L9804S																																																					
Edge 항목	Lm, Lk	Spec	Lm : 80uH ± 7%																																																			
		Max	Lm : 74.4uH																																																			
		Min	Lm : 85.6uH																																																			
Datasheet	<table border="1"> <thead> <tr> <th>No</th> <th>CLOSURE</th> <th>TERMINAL START</th> <th>TERMINAL FINISH</th> <th>ELECTRICAL CHARACTERISTICS</th> <th>TOLERANCE</th> <th>CONDITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>INDUCTANCE</td> <td>1</td> <td>6</td> <td>80.0</td> <td>uH</td> <td>± 7%</td> </tr> <tr> <td>3</td> <td>DC RESISTANCE</td> <td>1</td> <td>6</td> <td>0.450</td> <td>Ω</td> <td>MAX</td> </tr> <tr> <td>4</td> <td>DC CURRENT OVERLAP</td> <td>1</td> <td>6</td> <td>64.0</td> <td>uH</td> <td>MIN</td> </tr> <tr> <td>5</td> <td>LAYER SHORT</td> <td colspan="5">AC 1.5KV, 60Hz</td></tr> <tr> <td>6</td> <td>AC ELECTRIC STRENGTH</td> <td colspan="5">AC 1.0KV, 1MINUTE, 5mA (COIL TO CORE)</td></tr> <tr> <td>7</td> <td>INSULATION RESISTANCE</td> <td colspan="5">DC 500V, 100M OHM MIN (COIL TO COIL, ANY COIL TO CORE)</td></tr> </tbody> </table>					No	CLOSURE	TERMINAL START	TERMINAL FINISH	ELECTRICAL CHARACTERISTICS	TOLERANCE	CONDITION	1	INDUCTANCE	1	6	80.0	uH	± 7%	3	DC RESISTANCE	1	6	0.450	Ω	MAX	4	DC CURRENT OVERLAP	1	6	64.0	uH	MIN	5	LAYER SHORT	AC 1.5KV, 60Hz					6	AC ELECTRIC STRENGTH	AC 1.0KV, 1MINUTE, 5mA (COIL TO CORE)					7	INSULATION RESISTANCE	DC 500V, 100M OHM MIN (COIL TO COIL, ANY COIL TO CORE)				
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* Edge 항목 측정 방법



* Test Result

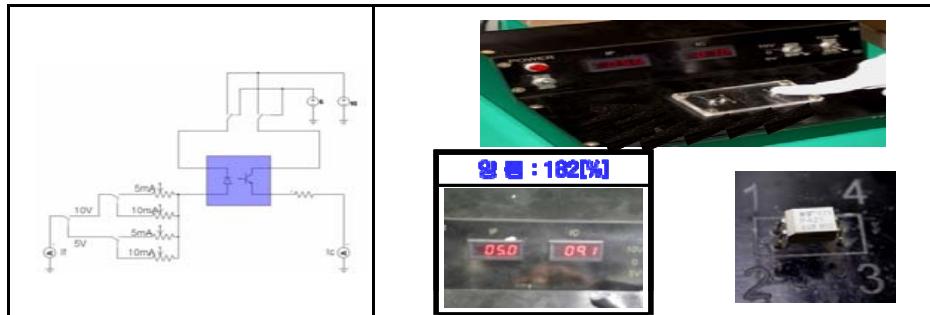
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	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	70.6°C	69.2°C
가혹 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass

Photo Coupler

품명	LTV817M-BN				
Maker	1st	LITEON			
	2nd	RENESAS			
적용 DC VSS	PD46B2Q_CDY				
Location	PCS801S,PCS802S,PCM801S				
Edge 항목	CTR	Spec	1.2V 5mA		
		Max	260%		
		Min	130%		
Datasheet	Rank Table of Current Transfer Ratio CTR				
	Model No.	Rank Mark	CTR(%)		
	LTV-817	L	50~100		
	LTV-817	A	80~160		
	LTV-817	B	130~260		
	LTV-817	C	200~400		
	LTV-817	D	300~600		
	LTV-817	L or A or B or C or D	50~600		

* Edge 항목 측정 방법



* Test Result

: Max/Min 적용 SET 각 1대씩 제작하여 온도 측정 및 조건별 동작파형 분석 시험 진행

	Test 조건 및 판정기준	Max Value SET	Min Value SET
Thermal	상/하한치 dT Check	49.5°C	48.7°C
가혹 Test (60°C)	Over Heat Test (Component Fail)	Pass	Pass
Noise Injection	Abnormal Operating (Component Fail)	Pass	Pass



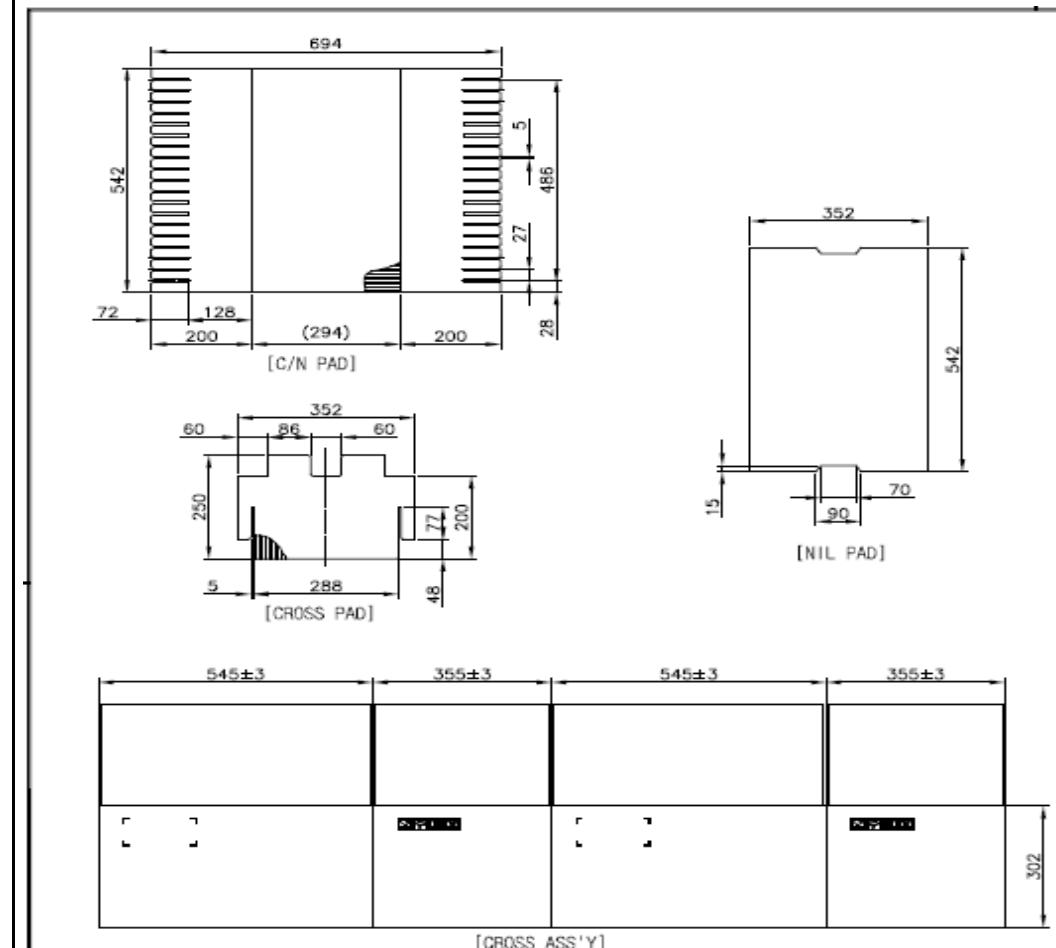
SPECIFICATION
PD46B2Q_CDY
(PACKING DRAWING PART)

STD RECORD NO.
PAGE PUB. DATE
PAGE REV. DATE

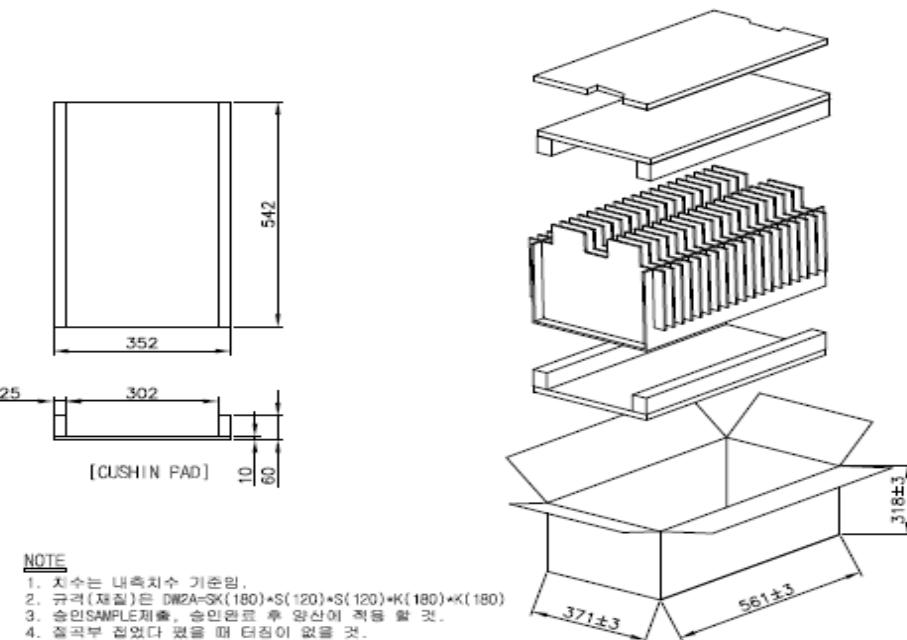
BN44-00522B
2011.12.13
2012.01.13

11. PACKING DRAWING PART

Weight	
Gross	Net
9,786g	543.7g



NO	THE NAME OF AN ARTICLE	DWG-NO	MATERIAL	Q'TY	REMARK
1	OUT BOX		DW(율판지)	1	
2	C/N PAD		SW(율판지)	2	
3	CROSS PAD		SW(율판지)	19	
4	NIL PAD		SW(율판지)	1	
5	CUSHIN PAD		PE-FOAM(ANTI)	2	


NOTE

- 지수는 내측치수 기준임.
- 규격(재질)은 DWA-SK(180)*S(120)*S(120)*K(180)*K(180)
- 승인SAMPLE제출, 승인원료 후 양산에 적용 할 것.
- 접착부 접었다 펴었을 때 더럽지 없을 것.
- 접착방법은 도면 표기 방향으로 할 것.
- 포장수량은 10EA임.

MODEL	Weight	
	Gross	NET
PD46B2Q_CDY	9,756g	543.7g

OQA-2049에서 지정된 환경관리물질 기준을 만족할 것.
 Comply with the threshold of substances which are specified in OQA-2049

NO.	REVISION					UNIT	SCALE	PLANNED BY	CHECKED BY	APPROVED BY	FILE NAME	3RD ANGLE	USER	PROJECTION	GENERAL TOLERANCE				MASTER CARTON (PD46B2Q_CDY)	DWG NO.					
															LIMIT	LEVEL1	LEVEL2	LEVEL3							
						mm	1/10	J.U.LEE	S.B.SHIN	S.J.LEE					0 ~ 4	±0.05	±0.10	±0.20		2011.11.10	2011.11.10	2011.11.10			
															4 ~ 16	±0.08	±0.15	±0.30							
															16 ~ 64	±0.12	±0.25	±0.50							
															64 ~ 250	±0.25	±0.40	±0.80							



SPECIFICATION
PD46B2Q_CDY
(LABEL DRAWING LIST)

STD RECORD NO.
PAGE PUB. DATE
PAGE REV. DATE

BN44-00522B
2011.12.13
2012.01.13

12. LABEL DRAWING LIST

NO	THE NAME OF AN ARTICLE	DWG-NO	MATERIAL	Q'TY
1	LABEL-BARCODE		WHITE POLYESTER T=0.075	1



* BARCODE 입력 정보(25 Digit)

CN07 BN4400522B DC07 BB3 0001

② ③ ④ ⑤ ⑥ ⑦

* 문자인쇄 내용(BARCODE 하단 인쇄)

SEC S/N: CN07 BN4400522B DC07 BB4 0001 R.B

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① 삼성VD SERIAL NUMBER : SEC S/N:

② Country Code(2자리) : 부품 및 Unit의 제조 원산지(국가)를 영문자 2자리로 표기
한국 → KA, 중국 → CN, 루마니아 → RO

③ Unit Code(2자리) : DC Voltage Stabilized Supply → 07, AC Voltage Stabilized Supply → 08(고객사 지정)

④ SEC Part Number(10자리) : 모델별 고객사 지정 고유번호

⑤ 생산처 CODE(4자리) : 동양E&P → DC07 (고객사 지정)

⑥ 생산 Date Code(3자리)

1째 자리(2009년→S, 2010년→Z, 2011년→B, 2012→C, 2013→D, 2014→F,
2015→G, 2016→H, 2017→J, 2018→K, 2019→M, 2020→N)

2째 자리(1월→1, 2월→2... 10월→A, 11월→B, 12월→C)

3째 자리(1일→1, 2일→2... 10일→A, 11일→B, 12일→C...31일→V), 알파벳 순

⑦ 일련번호(4자리) : 부품 및 Unit 공급업체의 일별 생산 순서

0001, 0002, 0003, 0004.....,9997, 9998, 9999, 0이후 만단위는 알파벳(A~Z)으로 표기 함.

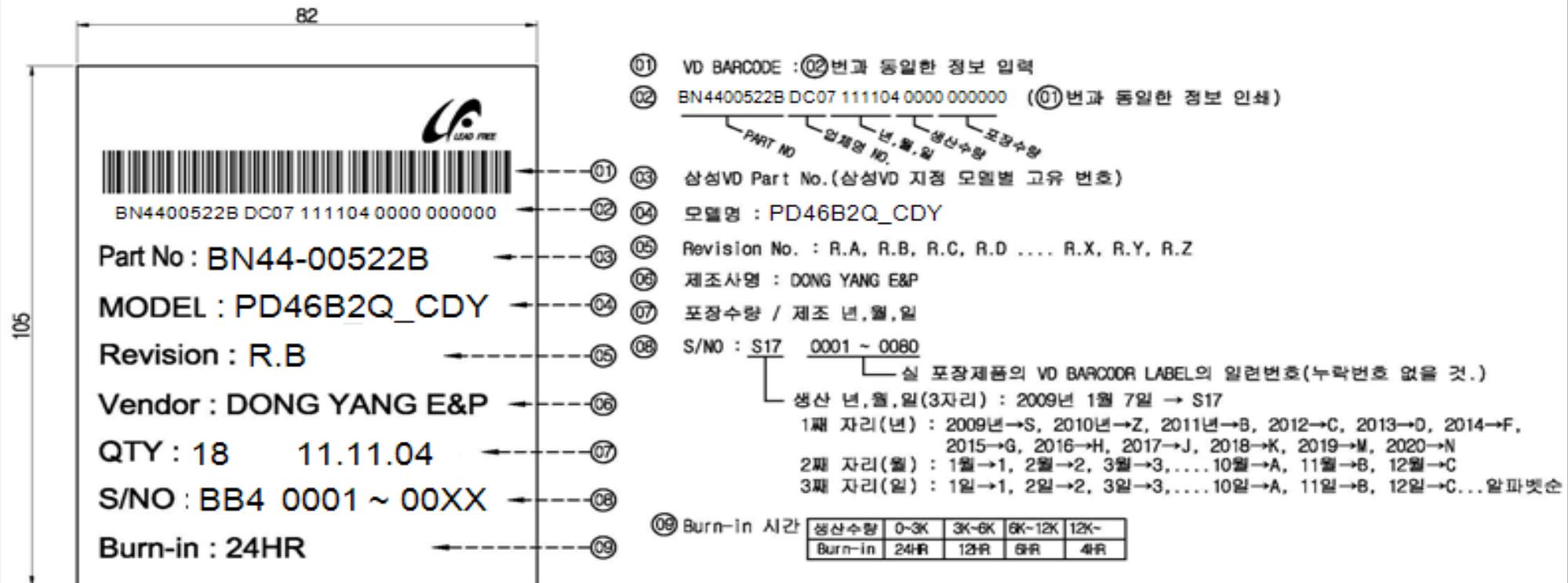
A000, A001, A002.....A999, B000,...B999, C000...C999

⑧ Revision No.: 표기방법 "R.A" Revision 변경시 A, B, C, ..., X, Y, Z

OQA-2049에서 지정된 환경관리물질 기준을 만족할 것.
Comply with the threshold of substances which are specified in OQA-2049

NO.	GENERAL TOLERANCE	UNIT	SCALE	PLANNED BY		CHECKED BY	APPROVED BY	T T E	LABEL-BARCODE (PD46B2Q_CDY)
				LIMIT	LEVEL 1 / LEVEL 2	J.U.LEE	S.B.SHIN	S.J.LEE	
	0 ~ 4	±0.05	±0.10						
	4 ~ 16	±0.08	±0.15	mm	2/1	2010.12.20	2010.12.20	2010.12.20	
	16 ~ 64	±0.12	±0.25						
	64 ~ 250	±0.25	±0.40	PROJECTION	USER	FILE NAME			
	LIMIT	LEVEL 1	LEVEL 2						
	0 ~ 4	±0.20		3RD ANGLE	⊕⊖				
	4 ~ 16	±0.30							
	16 ~ 64	±0.50							
	64 ~ 250	±0.80							
REVISION					DONG YANG E&P energy & power solution	DWG NO.	HAAA09238		

NO	THE NAME OF AN ARTICLE	DWG-NO	MATERIAL	Q'TY
1	BOX LABEL	HAAA09349	아트지 T=0.1	1



OQA-2049에서 지정된 환경관리물질 기준을 만족할 것.
 Comply with the threshold of substances which are specified in OQA-2049

GENERAL TOLERANCE	UNIT	SCALE	PLANNED BY	CHECKED BY	APPROVED BY	T	BOX LABEL				
							J.U.LEE	S.B.SHIN	S.J.LEE	E	(PD46B2Q_CDY)
0 ~ 4	±0.05	±0.10									
4 ~ 16	±0.08	±0.15									
16 ~ 64	±0.12	±0.25									
64 ~ 250	±0.25	±0.40	PROJECTION	USER	FILE NAME						
LIMIT	LEVEL1	LEVEL2									
±0.10			3RD ANGLE	◎							
±0.30											
±0.50											
±0.80											





SPECIFICATION
PD46B2Q_CDY
(RoHS 6 MATERIAL INGREDIENT DATA)

STD RECORD NO.
BN44-00522B
PAGE PUB. DATE
2011.12.13
PAGE REV. DATE
2012.01.13

13. RoHS 6 MATERIAL INGREDIENT DATA

MODEL : PD46B2Q_CDY

NO	ITEM	VENDOR	PART NO	원재료명	재질	유해물질 함유량[ppm]						REMARK
						Pb(납)	Cd(카드뮴)	Hg(수은)	6가크롬	PBBS	PBDEs	
1	PCB	GAOXIN ELECTRONICS	PCB]PD46B2Q_CDY,PD55B2Q_CDY	FR-1(PCB 회판)	Formaldehyde/Phenol/Copper	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Solder Ink	Trimethylol-Propane triacrylate/2-Hydroxy ethylmethacrylate/Silica crystalline	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Marking Ink(흰색)	Trimethylol-Propane triacrylate/2-Hydroxy ethylmethacrylate/Silica crystalline	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Marking Ink(흑색)	Trimethylol-Propane triacrylate/2-Hydroxy ethylmethacrylate/Silica crystalline	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				표면처리(Flux)	Maleate Rosin Polymer Latic Acid Toluene Ethyl Acetate Methyl Alcohol	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
2	HEAT SINK	YOOWON NRT	H/S]PD46B2Q_CDY HS1	BODY : AL6063	ALUMINUM/SILICON/IRON/COPPER/MANGANESE/MAGNETIUM/ZINC/LEAD	0	0	0	0	-	-	
				PIN : SPCC	IRON/SILICON/MANGANESE/PHOSPHATE/SULFUR/CARBON	0	0	0	0	-	-	
3	DIODE-BRIDGE	SHINDENGEN	D15XB60	Mold resin	CV series	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	고용점 Solder 85%이상 함유된 납
				Lead frame	Cu	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Terminal plating	Sn-Bi	N.D.	N.D.	N.D.	N.D.	-	-	
				Connector	Cu	N.D.	N.D.	N.D.	N.D.	-	-	
				Chip	Si	icy about the half of the high precision analysis data (Silicon chip)						
4	COMPOUND	SHINETSU	G-746	Chip mounted part	Sn-95Pb	950900	<2	<1	<1	0	0	
				실리콘복합물	Zinc oxide/Methylidodecyl, methyl(2-	0	1.1	0	0	0	0	
5	SCREW-TAPTRITE	SUNGJINMETAL	SW MSBH]3*10 Cr3+/SILVER	SCREW	IRON/CARBON/SILICON/MANGANESE/PHOSPHORUS/SULFUR/ALUMINUM/NITROGEN/CHROME/COPPER/NICKEL/BORON/TITANIUM/황산NI	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				BODY : AL6063	ALUMINUM/SILICON/IRON/COPPER/MANGANESE/MAGNETIUM/ZINC/LEAD	0	0	0	0	-	-	
6	HEAT SINK	YOOWON NRT	H/S]PD46B2Q_CDY HS2	PIN : SPCC	IRON/SILICON/MANGANESE/PHOSPHATE/SULFUR/CARBON	0	0	0	0	-	-	
				Epoxy resin	Epoxye resin/Antimony trioxide/Other bromine fire retardant	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
7	DIODE-SCHOTTKY	SANKEN	FMEN-220A	Lead frame	Copper	2	N.D.	N.D.	N.D.	-	-	
				Wire	Gold	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Lead Finish	Tin/Silver	20	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die Attach Adhesive	Silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die	Silicon	N.D.	N.D.	N.D.	N.D.	-	-	
8	U.F-DIODE	TSC	SFF1005GA SFF1005G	Dice	sl	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	고용점 Solder 85%이상 함유된 납
				Solder Paste	Pb/Sn/Ag	925900	N.D.	N.D.	N.D.	N.D.	N.D.	
				Lead frame	Cu	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Jumper	Cu	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Molding compound	Epoxy Resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
9	COMPOUND	SHINETSU	G-746	plating	Sn	90	N.D.	N.D.	N.D.	N.D.	N.D.	
				marking	laser marking	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
10	SCREW-TAPTRITE	SUNGJINMETAL	SW CH S/W 3*9.2 SILVER	SCREW	IRON/CARBON/SILICON/MANGANESE/PHOSPHORUS/SULFUR/ALUMINUM/NITROGEN/CHROME/COPPER/NICKEL/BORON/TITANIUM/황산NI	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				BODY : AL6063	ALUMINUM/SILICON/IRON/COPPER/MANGANESE/MAGNETIUM/ZINC/LEAD	0	0	0	0	-	-	
11	HEAT SINK	YOOWON NRT	H/S]PD46B1Q_CDY HS3	PIN : SPCC	IRON/SILICON/MANGANESE/PHOSPHATE/SULFUR/CARBON	0	0	0	0	-	-	
				Lead frame	Cu/Fe/P/Ag	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
12	FET	TOSHIBA	TK8A50D	Chip	Si	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	고용점 Solder 85%이상 함유된 납
				Die attach adhesive	Pb/Sn/Ag	911100	N.D.	N.D.	N.D.	N.D.	N.D.	
				Wire	Al	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Encapsulation	Silica/Resin/Antimony/Brominated	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				plating	Sn	20	N.D.	N.D.	N.D.	N.D.	N.D.	
13	FET	MAGNACHIP	MDF11N60	Mold Compound MP4000	Otgro Cresol Novolac Resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Lead frame	Phenolic Resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die attach	Brominated epoxy resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die Plating	Antimony compounds (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die Plating	Silica	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
14	DIODE-RECTIFIER	NXP	BYV29FX-600	Lead frame	Copper (Cu)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Wire	Gild	2	N.D.	N.D.	N.D.	-	-	
				Lead Finish	Tin/Silver	20	N.D.	N.D.	N.D.	-	-	
				Die Attach Adhesive	Silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Die	Silicon (Si)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
15	COMPOUND	SHINETSU	G-746	Plating	Tin (Sn)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
				Epoxy resin	Epoxide resin/Antimony trioxide/Other bromine fire retardant	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
16	SCREW-TAPTRITE	SUNGJINMETAL	SW CH S/W 3*9.2 SILVER	Lead frame	Copper	2	N.D.	N.D.	N.D.	-	-	
				Wire	Gild	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
17	SCREW-TAPTRITE	SUNGJINMETAL	SW CH S/W 3*9.2 SILVER	Lead Finish	Tin/Silver	20	N.D.	N.D.	N.D.	-	-	
				Die Attach Adhesive	Silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
18	SCREW-TAPTRITE	SUNGJINMETAL	SW CH S/W 3*9.2 SILVER	Die	Silicon	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	

42	DIODE-ZENER	Leshan Radio Company	LM3Z6V8	DICE SOLDER WAFER LEAD WIRE MOLDING COMPOUND	SIO2 Pb/Sn/Ag Cu/Pure Sn Silica/EPOXY RESIN/PHENOLIC RESIN/ANTIMONY OXIDE/Brominated epoxy resin/Carbon Black	N.D 883385 16 N.D	N.D N.D N.D N.D	N.D N.D N.D N.D	N.D N.D N.D N.D	N.D N.D N.D N.D	고용점 Solder 85%이상 함유된 날
43	X-CAP	SUNIL ELECTRONICS	436D 275V 0.68uF K 15 ↗-Forming 1713 436D 275V 0.1uF K 15 1760	Film TZ80185-wire TCA wire YR/H-2000 FH44PE 5196-Ink 5191-Additive	Polypropylene homopolymer Sn/Zn/Sb/Cu Cu/Sn Diglycidylether of BPA Epoxyresin/Aluminum trihydrate Polypropylene polymer/Bromide Flame retardant(Nordioxin)/Rigidity modifier/Typical antioxidants Butanone Butanone	N.D 308 N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D Negative – N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	Lead free solder 800ppm 관리
				CE-752 DSPT7265 TCAW Pb-Free Solder PCE 210 BLUE 2 21A	CERAMIC Ag alloy Cu + Sn Ag + Cu + Sn Silica	14 N.D N.D 378 N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	1 N.D N.D N/A N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	
				CERAMIC MEDIUM SILVER PASTE SOLDER LEAD WIRE COATING	BaTiO3 Ag Sn Cu Resin	N.D N.D 39 N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	
				MKP FILM Tin-Zinc alloy wire LEAD WIRE	Polypropylene/Zinc Tin/Zinc Copper/Tin	N.D 259 N.D	N.D N.D N.D	N.D N.D N.D	N.D Negative N.D N.D	N.D N.D N.D	
				Epoxy resin PP CASE	Diglycidyl ether of Bisphenol A/Aluminum Trihydroxide Polypropylene/Decabromobiphenyl Oxide	N.D N.D	N.D N.D	N.D N.D	N.D N.D	N.D N.D	
				MKP FILM Tin-Zinc alloy wire LEAD WIRE	Polypropylene/Zinc Tin/Zinc Copper/Tin	N.D 259 N.D	N.D N.D N.D	N.D N.D N.D	N.D Negative N.D N.D	N.D N.D N.D	
				Epoxy resin PP CASE	Diglycidyl ether of Bisphenol A/Aluminum Trihydroxide Polypropylene/Decabromobiphenyl Oxide	N.D N.D	N.D N.D	N.D N.D	N.D N.D	N.D N.D	
				Film Al Foil TZ80185-wire TPC wire	Polypropylene Polymer Sn/Zn/Sb/Cu Fe/Cu/Sn	N.D N.D 308 N.D	N.D N.D N.D N.D	N.D N.D N.D N.D	N.D N.D N.D –	N.D N.D N.D N.D	
				HO917-R/H ECP-100BN	Diglycidylether of BPA Epoxyresin/ModifiedAcid Anhydride(MeTPHA) Diglycidyl Ether of Bisphenol A(DGEBA)/Diglycidyl Ether of BrominatedBisphenol A(DGEBBA)/Aluminum Hydrate,Fo	N.D N.D	N.D N.D	N.D N.D	N.D N.D	N.D N.D	
				5196-Ink 5191-Additive	Butanone Butanone	N.D N.D	N.D N.D	N.D N.D	N.D N.D	N.D N.D	
49	C-FILM	PILKOR ELECTRONICS	PCMT 468 4F104	MKT FILM Tin-Zinc alloy wire LEAD WIRE Epoxy Powder Marking Ink	Polyethylene Terephthalate/Aluminum Tin/Zinc Copper/Tin Epoxy resin/Alumina trihydrate Binder resin/Calcium carbonate	N.D N.D 259 N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D Negative N.D N.D	N.D N.D N.D N.D N.D	Lead free solder 800ppm 관리
				SL-290 DSPT7265 Al Foil Pb-Free Solder PCE 210 BLUE 2 21A	CERAMIC Ag alloy Cu + Sn Ag + Cu + Sn Silica	N.D N.D 378 N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	
				(+) Al-Foil (-) Al-Foil Separator Al-Case Pad Sleeve Paste Lead Wire Al Wire Adhesive-Tape Ink	Aluminum Aluminum Cellulose Aluminum Rubber PET Organic Solvent Fe/Cu/Sn+Bl Aluminum Polypropylene 2-PropMethyl Alcohol	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	– – – – – – – – – – – – – –	– – – – – – – – – – – – – –	
				NZE 450V 68uF 16*35.5 1.5 RB 105°C NZE 450V 22uF 10*33 3.2 RB 105°C NZE 200V 100uF 12.5*30 3.2 LB 105°C NXB 16V 2200uF 10*25 3.2 LB 105°C NXH 50V 47uF 6.3*11 2.5mm 105°C HXB 50V 22uF 6.3*7 5mm 105°C	Anode Foil Cathode Foil Separator Paste Case Metal Rubber Lead Line Terminal Sleeve ink(PET) Sleeve(PET)	Metal Metal Paper Liquid Metal Polymer Rubber Metal Metal Metal Liquid Liquid PET	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	Negative – N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D	N/A N/A N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D N.D
				BH 250V 22uF 10*20 DL 105°C MK 25V 470uF 10*12.5 105°C							

53	C-MLCC CHIP	SEMCO	CL21B105KBNC CL21B224KBNNNE CL21B104KBNC CL21C103JBFFNNNE CL21C472JAFNNNE	Ceramic Powder Inner Electrode Termination Paste Plating Plating	Barium Titanate/Barium Cabonate/Yttrium Oxide Nickel/Barium/Titanate Copper/Glass Nickel Tin	N.D. N.D. N.D. N.D. 47	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.		
54	BEAD CHIP	SUNLORD	PZ3216D350	BODY PLATING Electrode	Red Iron Oxide Nickel Oxide Zinc Oxide Tin Oxide Silver(+1) Oxide	N.D. N.D. 20 N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. 2.11 N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.		
55	BEAD CHIP	SUNLORD	GZ2012D600TF	BODY PLATING Electrode	Red Iron Oxide Nickel Oxide Zinc Oxide Tin Oxide Silver(+1) Oxide	N.D. N.D. 20 N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. 2.11 N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.		
56	RELAY-POWER	FUJITSU	FTR-F3PA005V	Wafer LEAD MOLD Compound Wafer WIRE	EPOXY RESIN Polybutylene terephthalate COPPER EPOXY RESIN COPPER ALLOY polyurethane enameled copper wire	N.D. N.D. 34.8 N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.		
57	VR	COPAL	FT-63ETP 203	Housing Roter Wiper Oring Terminal pin Adhesive Base element Electrode Resistive element	SP203/PBT/C2H3Cl SP203/PBT/C2H3Cl Pb/(Ni/Mn/Cu/Zn C3H7Cl3S Cu/Sn Sb203/C6H10O3 Ceramic Pb/Au/Cu /02Ru Pb/Mn/C u/B 1 /02Ru	0 0 7.76 0 0 24	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	Lead free solder 800ppm 관리	
58	R-METAL OXIDE	PILKOR	PPRR 2W 194 53103 PPRR 2W 194 53473 PPRR 2W 194 53478	Ceramic Rod Pre-Lacquer CAP Lead wire Outer Lacquer Coding Lacquer	Aluminum/Silicon/Magnesium /Calcium SiO2/1,3,5,7-Cyclooctatetraene Tin/Copper/Iron Copper/Tin Xylene/Cyclohexane/Butanol 2-Methoxy-1-methyl ethyl acetate/BPA계 EPOXY RESIN	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.		
59	R-Wire Wound	PILKOR	PWWR 172 73308	Ceramic Rod CAP R-Wire Lead-Wire Silicon Paint Color-Ink	ALUMINA Iron Cu-Ni ALLOY/Cu-Fe ALLOY Copper Silica/Vitreous Ink oil	13 N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.		
60	R-Wire Wound	SMART	SMW 02 T1 J R510 SMW 02 T1 J R130 SMW 02 T1 J R120	Ceramic Rod CAP R-Wire Lead-Wire Silicon Paint Color-Ink	ALUMINA Iron Cu-Ni ALLOY/Cu-Fe ALLOY Copper Silica/Vitreous Ink oil	13 N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.		
61	R-CHIP	YAGEO	RC1206FR-07 2ML RC1206FR-07 1ML RC1206JR-07 470KL RC1206FR-07 220KL RC1206FR-07 47L RC1206FR-07 1.2L RC0805FR-07 680K RC0805FR-07 220K RC0805FR-07 120K	Substrate Inner electrode (C1) Inner electrode (C2) Resistive layer Termination 1st Plating Termination 1st Plating Primary glass Overcoat II Marking	Ceramic Ag/Pd Ag RuO2 Ni Sn Frit Epoxy resin Epoxy resin	N.D. N.D. N.D. RuO2 200050 N.D. 12.7 N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	Glass(유리)에 함유된 납
62	CP WIRE	세현전자	JUMP 0.60 CP WIRE	TPC Wire Ceramic Rod Resistance Film Cap Glass Tube Dumet Wire Lead Coating	Fe/Copper/Tin Al2O3 Ti Fe/Sn-Cu SiO2/APC3/Na2O/K2O/PbO/MnO/Sb2O3/Rem Cu-N 382	N.D. 13 28 N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D.		
63	ARRESTER	MITSUBISHI	DSS-601M	Black compound White compound Silicon epoxy Gold wire IR-Dice PTR-Dice Silver epoxy L/F	Epoxy Epoxy Silicon Gold GaAs Si Ag Iron	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	Lead free solder 800ppm 관리	
64	PHOTO COUPLER	LITEON	LTV817M-BN	Ferrite Core Lead Wire (TPC Wire)	Fe203/NiO/ZnO/CuO Iron/Copper/Tin	N.D. N.D.	N.D. N.D.	N.D. N.D.	N.D. N.D.	N.D. N.D.	N.D. N.D.	
65	CORE FERRITE	SAMHWA	BFS3565A0L	Epoxy Bond (810-OR)	Diglycidyl Ether of Bisphenol A (DGEBEA)/Diglycidyl Ether/Trimethyl propane polyglycidyl Ether/Isopropenyl diphenyl phosphate/orange/Calcium Carbonate	N.D. N.D.	N.D. N.D.	N.D. Negative	N.D. N.D.	N.D. N.D.	N.D. N.D.	

66	CORE FERRITE	SAMHWA	BFD3565 R2F	Ferrite Core	Fe2O3/NiO/ZnO/CuO	N.D.	N.D.	N.D.	N.D.	-	-
				Lead Wire (Copper wire) Epoxy Resin (ECP-200)	Iron/Copper/Tin DGEBA/SILCA/DGEBA/Barium sulfate	N.D.	N.D.	N.D.	Negative	N.D.	N.D.
67	LINE FILTER	SUNGWON ELECTRONICS	SW05542BH	CORE	Fe/Mn/Zn/Ni	N.D.	N.D.	N.D.	N.D.	-	-
				CORE	Fe/Mn/Zn/Ni	N.D.	N.D.	N.D.	N.D.	-	-
				BOBBIN(PHENOL)	PHENOL/Fe/Cu/Sn Bz/St203/Zn	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				BOBBIN(PEI)	OL/PHENOL/XYLENE/ZINC	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				WIRE(UEW)	CU/MDI/TMP/NPG/PA/ADIPICACID/GLYCERIN/EG/CRESOL/PHENOL/XYLENE/ZINC	N.D.	N.D.	N.D.	Negative	N.D.	N.D.
				ADHESIVE (ES-928P)	Diglycidyl ether of BPA/Polypolypropylene glycol diglycidyl ether/Silica/Polyamine adduct/Additive	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE (UNI-BOND #812)	DIGLYCIDYL ETHER OF BISPHENOL A /isopropyl Iphenyl I Diphenyl I Phosphate /Silica /ETC	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				FLUX	JS-7000S1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				SOLDER MARKING (LABEL)	Sn/Cu/PHOSPHORUS/ROSIN/P PIGMENT/HYDROCARBON SOLVENT/ROSIN MODIFIED PHENOLIC RESIN/OIL/ADDITIONS BASE MATERIAL/ACRYLIC CO-POLYMER ACHESIVE/RELEASE	267	N.D.	N.D.	Negative	N.D.	N.D.
				BLACK COLOR	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
68	NORMAL-CHOKE	SUNGWON ELECTRONICS	SW08030	IRON	Fe/Mn/Zn/Ni	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				WIRE (UEW)	CU/MDI/TMP/NPG/PA/ADIPICACID/GLYCERIN/EG/CRESOL/PHENOL/XYLENE/ZINC	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE (EPICHEM-260)	DIGLYCIDYL ETHER OF BISPHENOL A/GLYCIDYL NEODECANOATE/SILICON DIOXIDE/CALCIUM CARBONATE/(ETHYL-AMETHYL IMIDAZOLE)	N.D.	N.D.	N.D.	N.D.	-	-
				수출류브	Ethylene Vinyl Acetate/Magnesium Hydroxide/MP/Anti-oxide/Plament	N.D.	N.D.	N.D.	N.D.	-	-
				FLUX	JS-7000S1	N.D.	N.D.	N.D.	Negative	N.D.	N.D.
				SOLDER MARKING	Sn/Cu/PHOSPHORUS/ROSIN/P MINERAL THREEBOND/ALUMINUM	267	N.D.	N.D.	N.D.	N.D.	N.D.
				CORE	Mn-Zn (PL-7)	N.D.	N.D.	N.D.	N.D.	-	-
				BOBBIN	Mn-Zn (H4)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				LEAD WIRE	Mn-Zn (MP2)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				TAPE	Mn-Zn (DMR40)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
69	INDUCTER-LED DRIVE	YAO SHENG ELECTRONICS	EE2020 ↳ 80uH	ADHESIVE	PM9820	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				VARNISH	CP-WIRE	14	N.D.	N.D.	N.D.	-	-
				SOLDER FLUX	USTC(UEW)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				MARKING	POLYESTER FILM TAPE(WHITE)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE	SW-870	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				VARNISH	SW-860(HF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				SOLDER FLUX	DVB-2085(*)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				MARKING	LEAD FREE	199	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE	YF-399	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				VARNISH	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
70	TRANS-DRIVE	YAO SHENG ELECTRONICS	EE1011 500uH	CORE	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				BOBBIN	Mn-Zn (PL-7)	N.D.	N.D.	N.D.	N.D.	-	-
				LEAD WIRE	Mn-Zn (YP2)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				WIRE	Mn-Zn (H6)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				TAPE	Mn-Zn (DMR40)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE	PF2736	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				VARNISH	CP-WIRE	14	N.D.	N.D.	N.D.	-	-
				SOLDER FLUX	USTC(UEW)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				MARKING	POLYESTER FILM TAPE(WHITE)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE	SW-870	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
71	TRANS-STBY	YAO SHENG ELECTRONICS	EE2515W 550uH	CORE	SW-860(HF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				BOBBIN	DVB-2085(*)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				LEAD WIRE	LEAD FREE	199	N.D.	N.D.	N.D.	N.D.	N.D.
				WIRE	YF-399	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				TAPE	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				ADHESIVE	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				VARNISH	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				SOLDER FLUX	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				MARKING	INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
				CORE	INK&LABEL	N.D.	N.D.	N.D.	N.D.	-	-

Lead free solder 800ppm 관리

72	INDUCTER-PFC	YAO SHENG ELECTRONICS	PQ3813 150uH	CORE BOBBIN LEAD WIRE TAPE ADHESIVE VARNISH SOLDER FLUX MARKING	Mn-Zn (PL-13)	N.D.	N.D.	N.D.	-	-		Lead free solder 800ppm 관리
					Mn-Zn (HE6)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Mn-Zn (TPW33)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Mn-Zn (DMR95)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					PM9820	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					CP-WIRE	14	N.D.	N.D.	N.D.	N.D.	N.D.	
					USTC(UEW)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					POLYESTER FILM TAPE(WHITE)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					SW-870	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					SV-860(HF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					DVB-2095(*)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					LEAD FREE	199	N.D.	N.D.	N.D.	N.D.	N.D.	
					YF-990	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
73	TRANS-MULTI	YAO SHENG ELECTRONICS	EE4117 530uH	CORE BOBBIN LEAD CAP WIRE TAPE ADHESIVE VARNISH SOLDER FLUX MARKING	Mn-Zn (P-7)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Mn-Zn (YP2)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Mn-Zn (TP4)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Mn-Zn (DMR40)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					PM9820	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					CP-WIRE	14	N.D.	N.D.	N.D.	N.D.	N.D.	
					USTC(UEW)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					POLYESTER FILM TAPE(GREEN)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					SW-870	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					SV-860(HF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					VARNISH	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					SOLDER	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					FLUX	199	N.D.	N.D.	N.D.	N.D.	N.D.	
					INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					INK&LABEL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
74	VARISTOR	WANMING	WMR14D751KH3B3.5W-HK	Dielectric Medium Electrode Solder Lead Wire Coating	Zinc Oxide Power	14	4	N.D.	N.D.	N.D.	N.D.	
					silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Solder Wire	39	N.D.	N.D.	N.D.	N.D.	N.D.	
					Tinned Wire	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
75	THERMISTOR	WANMING	WTR15D050MK3B3L	Manganese dioxide Electrode Solder Lead Wire Coating	Epoxy Resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Manganese dioxide	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Solder Wire	39	N.D.	N.D.	N.D.	N.D.	N.D.	
76	FUSE	BUSSMANN	S505-V-5-R	Element Soldier Boot Lead Cap Filling	CP Wire	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					silicone resin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Sn/Cu	50	N.D.	N.D.	N.D.	N.D.	N.D.	
					Sn/Cu/Ag	73	N.D.	N.D.	N.D.	N.D.	N.D.	
					Ceramic	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Cu/Sn	39	N.D.	N.D.	N.D.	N.D.	N.D.	
77	INLET	DONGIL TECHNOLOGY	DAC-18D3M	Inlet Body PCB TAP/TUB INNER PIN G2 PCB PIN B	NI-plated Brass	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Polyamide 66/Melamine Cyanurate/Carbon Black	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Copper/Zn/Ni	21.5	N.D.	N.D.	N.D.	N.D.	N.D.	
					Copper/Zn/Ni	15	N.D.	N.D.	N.D.	N.D.	N.D.	
78	CONNECTOR	YEONHO ELECTRONICS	SMAW200-H20S2	Wafer Pin Hook	Steel/Carbon/Manganese/Copper/Tin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					PA66	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Brass	15	N.D.	N.D.	N.D.	N.D.	N.D.	
79	CONNECTOR	YEONHO ELECTRONICS	SMW200-H22CBF SMW200-H20CBF	Wafer Pin	LCP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
					Brass	15	N.D.	N.D.	N.D.	N.D.	N.D.	
80	CONNECTOR	YEONHO ELECTRONICS	SMW200-02P	Wafer Body Pin	PA66	13.7	N.D.	N.D.	N.D.	N.D.	N.D.	
					C2700	15	N.D.	N.D.	N.D.	N.D.	N.D.	
81	TERMINAL PIN	SAMSUNG JS	EYELET SEY-P-1630 EYELET SEY-P-2030	C2680R-0 Sn ₉₄	화도	19	N.D.	N.D.	N.D.	-	-	
					Sn	9	N.D.	N.D.	N.D.	-	-	
82	LUG TERMINAL PIN	ELEBER TECH	TERMINAL GND]HV32HD-9DY	BRASS(S2120) NI도금 풀리에트릴	Cu/Sn/P	27	0	0	0	0	0	
					0	0	0	0	0	0	0	
83	PE-FORM	SAMJU ENTERPRISE	PE FOAM]PD46B1QE_CDY	INK	풀리에트릴	0	0	0	0	0	0	
					POLY Amide Resin/Pigment/Toluene/Ethyl Acetate/Isopropyl Alcohol/Additives	0	0	0	0	0	0	
84	BOX	신림,파커스	MASTER CARTON]PD46B1Q_CDY	Paper (SK) Paper (S) Paper (K) Flexo Ink Barbed wire	Corrugated cardboard	15	0	0	0	0	0	
					Corrugated cardboard	20	0	0	0	0	0	
					0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	
					Zinc	67.7	0	0	0	0	0	
85	SOLDER WIRE	HEESUNG METAL	SOLDER WIRE HSE-04 0.8Φ	SOLDER	Sn/Cu/P	116	0	0	0	-	-	
					Sn/Cu/P	279	0	0	0	-	-	
86	SOLDER WIRE	HEESUNG METAL	SOLDER WIRE HSE-01 3Φ	SOLDER	ROGIN/광업용알콜/활성제	0	0	0	0	0	0	
					IPA	0	0	0	0	0	0	
87	FLUX	태원화학	FLUX LF-715K	SV-PBF-304P	FLUX 회색재	TS-4500	-	-	-	-	-	
					S-1000	-	-	-	-	-	-	
88	FLUX 회색재	태원화학	FLUX 회색재 TS-4500				-	-	-	-	-	

89	CHIPBOND	HI TECH KOREA	HT-130D-120	EPOXY RESIN HARDNER FILLER PIGMENT	BISPHENOL A AMINO ACID Cycloaliphatic Amine SiO ₂ Organic Pigment Red/FLUORESCENT PIGMENT	0	0	0	0	0	0	
90	LABEL	LG LABEL	ROCKY2	코팅지 BOND 원단 BOND INK(ARONON-T)	Polyethylene Terephthalate acrylic co-polymer 죽이아트지90g acrylic co-polymer Color Pigment/Synthetic Resin/Vegetable Oil/Ink Solvent/Additive	N.D	N.D	N.D	N.D	N.D	N.D	
91	LABEL	LG LABEL	LABEL all series parts list	원단 BOND INK	죽이아트지90g acrylic co-polymer Origomer/Resin/Monomer/광종합개시제/안료/Wax류/첨가	0	0	0	0	0	0	
92	PCB SUPPORTER	GNETEC	SUPPORTER]GNE 2.7-2.4-3.0	Epoxy resin	Glass Fibers Non-hazardous Cured Resin Inorganic Filler CU SN	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D	N.D N.D N.D N.D N.D		
93	PCB SUPPORTER	C&Tech	PCB SUPPORTER]PD46B2Q_CDY	PA66 + G0%	PA66 + G0%	0	0	0	0	0	0	
94	RTV	DOW CORNING	RTV EA4100	실리콘	Dimethyl siloxane, hydroxyterminated/Alumina hydrate/Calcium/carbonate/Vinyltri(methylethylketoxime)silane/Methylvinyl siloxane, hydroxoy-terminated/Methylethylketoxime	0	0	0	0	0	0	



SPECIFICATION
PD46B2Q_CDY
(MVT ACTUAL INSPECTION RESULT)

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2011.12.13
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14. MVT ACTUAL INSPECTION RESULT

Process Quality Control Plan																	
Vendor Name			동양이엔피				Manufacturer SiteD			KOREA							
Item			DC VSS				Drafter			양일모							
SPEC			LED Board				Date(Orig.)			2011.11.15							
CODE-NO			BN44-00522B				Date(Rev.)			-							
Pro. No	Process Name	Failure				Method						결과					
		Failure Mode	SEV (심각도)	Control Item	Occur (발생도)	Spec. / Tolerance		Evaluation Measurement Technique	SPL Size	SPL Freq.	Detes (검출도)		RPN				
1	수입검사	TRANS LINE FILTER 특성불량	8	특성검사	2	P046B2Q-CDY MQGAH034580 L: 500uA MIN(8 - 1) 100uA,1V DCR: 0.802 Max. Leakage: L: 13.04uA Max (8 - 1) 100uA,1V 내전자: AC4.21/5.1/5KV SmA(P Cell-S Col-P Cell-C Core,5 Cell-Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MQGAH034670 L: 530uA ±7%(-1 ~ 6) 100uA,1V DCR: 0.802 Max. Leakage: L: 110uA ±15% (1 ~ 6) 100uA,1V 내전자: AC4.21/5.1/5KV SmA(P Cell-S Col-P Cell-C Core,5 Cell-Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MQGAH034700 L: 550uA ±7%(-1 ~ 3) 100uA,1V DCR: 0.802 Max. Leakage: L: 110uA ±15% (1 ~ 3) 100uA,1V 내전자: AC4.21/5.1/5KV SmA(P Cell-S Col-P Cell-C Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MQGAH034730 L: 150uA ±7%(-1 ~ 3) 100uA,1V DCR: 0.352 Max. 내전자: AC0.4KV SmA(Col-Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MQHAH031342 L: 3%H ±20%(-1 ~ 2) 100uA,1V DCR: 0.043G Max. 내전자: AC0.4KV SmA(Col-Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MQHAH031340 L: 100uA ±7%(-2 ~ 6) 100uA,1V DCR: 0.4502 Max. 내전자: AC0.4KV SmA(Col-Core) 정의자: DC500V 1000Ω! - P046B2Q-CDY MRRAM023380 L: 9.8mΩ ±50%, -30%(1 ~ 2, 4 ~ 5) 100uA,1V DCR: 1.112G Max. 내전자: AC1.5KV SmA(Line-Line) 정의자: DC500V 1000Ω!	검사기준서 및 승인원		S3 : 0.4	Lot	1	16	CTF				
2	준비작업 (HEAT SINK)	부품 파손	7	SCREW 체결 토크	1	4~5.5Kg/cm				작업표준서	2회	일	5	35	CTQ		
4	SMD	부품 취부무	8	REFLOW 경화온도,시간	3	140°C±5°C, 110sec±10sec				작업표준서	2회	일	4	96	CTQ		
15	AUTO SOLDERING	남땜 불량	8	예열 온도	6	100°C±10°C				SOLDERING CHECK SHEET	2회	일	4	192	CTQ		
				C/V Speed	6	1.0~1.5m/min				SOLDERING CHECK SHEET	2회	일	4	192	CTQ		
				남조온도	6	255°C±5°C				SOLDERING CHECK SHEET	2회	일	4	192	CTQ		
24	2차 전압검사	출력전압	8	출력 전압	3	A5V				작업표준서	전수	일	2	48	CTQ		
28	출하검사	출력전압	8	출력 전압	1	A5V B5V B13V Vamp Vdr				검사기준서 및 승인원	CHECK n=5 c=0	LOT	2	16	CTF		

Process Quality Control Plan

Vendor Name		동양이엔피			Manufacturer SiteD		KOREA					
Item		DC VSS			Drafter		양일보					
SPEC		LED Board			Date(Orig.)		2011.11.15					
CODE-NO		BN44-00522B			Date(Rev.)		-					
Pro. No	Process Name	Failure				Method					결과	
		Failure Mode	SEV (심각도)	Control Item	Occur (발생도)	Spec. / Tolerance	Evaluation Measurement Technique	SPL Size	SPL Freq.	Detes (검출도)		RPN
1	수입검사	PCB:외관 검사	4	외관 확인	4	실크 인쇄 상태 및 정정공 위치,REV상태를 승인 원을 기준으로 확인	승인원 검사 기준서	G-II:1.0	LOT	1	16	-
		PCB:치수 측정	3	치수 측정	2	245*285±0.2mm	승인원 검사 기준서	Check n=5,c=0	LOT	1	6	-
		PCB:두께 측정	1	두께 측정	1	1.6(T)±10%(1.44mm~1.76mm)	승인원 검사 기준서	Check n=5,c=0	LOT	5	5	-
		PCB:Film 대조 검사	8	Film 대조 확인	1	승인된 FILM GAUGE를 대조하여 동일여부 확인	승인원 검사 기준서	Check n=5,c=0	LOT	1	8	-
		Heat Sink 외관 불량	1	외관 확인	5	유해 결점이 없을 것	승인원 검사기준서 검사설적서	GII : 1.0	LOT	2	10	
		Heat Sink 치수	1	치수 확인	5	Heat Sink-1 : 53.0±0.25mm 24.1±0.25mm 30.0±0.25mm 14.2±0.15mm 8.9±0.2mm 30.0±0.25mm	승인원 검사기준서 검사설적서	CHECK n=5 c=0	LOT	1	5	
						Heat Sink-2 : 192.0±0.40mm 174.1±0.40mm 156.4±0.40mm 139.0±0.40mm 123.4±0.40mm 100.6±0.40mm 85.3±0.40mm 30.0±0.25mm 10.1±0.15mm 30.0±0.25mm						
						Heat Sink-3 : 126.6±0.40mm 115.11±0.25mm 90.4±0.40mm 63.7±0.25mm 27.3±0.25mm 12.2±0.15mm 25.0±0.25mm 10.1±0.15mm 25.0±0.25mm						
		Heat Sink 삽입 불량	5	삽입성 확인	5	PCB 삽입 시 이상 없을 것	승인원 검사기준서 검사설적서	CHECK n=5 c=0	LOT	1	25	
		TRANS LINE FILTER 특성 불량	8	특성검사	2	- PD4682Q-CDY MQGAH034580 L: 500uH MIN(8 - 1) 100%,1V DCR: 0.800 Max. Leakage L: 13.0uH Max (8 - 1) 100%,1V 내전압: AC1.0V,1.0KV,5mA(P Coil-Core,S Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MQGAH034670 L: 530uH ±7% (1 - 6) 100%,1V DCR: 0.800 Max. Leakage L: 110uH ±15% (1 - 6) 100%,1V 내전압: AC4.2V,1.5V,5KV,5mA(P Coil-S Coil, P Coil-Core,S Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MQGAH034700 L: 550uH ±7% (1 - 3) 100%,1V DCR: 0.800 Max. Leakage L: 25.0uH Max (1 - 3) 100%,1V 내전압: AC4.2V,1.5V,5KV,5mA(P Coil-S Coil, P Coil-Core,S Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MQHA0D013320 L: 150uH ±7% (1 - 3) 100%,1V DCR: 0.300 Max. 내전압: AC0.8KV,5mA(Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MQHA0D013342 L: 39uH ±20% (1 - 2) 100%,1V DCR: 0.040 Max. 내전압: AC1.0KV,5mA(Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MQHA0D013360 L: 100uH ±7% (2 - 6) 100%,1V DCR: 0.450G Max. 내전압: AC1.0KV,5mA(Coil-Core) 절연저항: DC500V 100MΩ† - PD4682Q-CDY MRBAM023380 L: 9.8mH ± 50%, - 30%(1 - 2 - 3) 100%,1V DCR: 0.115G Max. 내전압: AC1.5KV,5mA(Line-Line) 절연저항: DC500V 100MΩ†	검사기준서 및 승인원	S3 : 0.4	Lot	1	16	CTF
		TRANS LINE FILTER 치수불량	1	치수검사	5	- MQGAH034580: Pin 간격 17.0±0.5mm - MQGAH034670: Pin 간격 66.8±0.5mm - MQGAH034700: Pin 간격 42.14±0.5mm - MQHA0D013320: Pin 간격 44.8±0.5mm - MQHA0D013342: Pin 간격 6.0±0.5mm - MQHA0D013360: Pin 간격 23.0±0.3mm - MRBAM023380: Pin 간격 18.44±0.3mm	검사기준서 및 승인원	CHECK n=5 c=0	Lot	1	5	OK
		TRANS LINE FILTER 권선불량	8	분해검사	2	SPEC 만족 할 것(승인원) - 자체 제작, Vendor, 규격 및 청결상태, 권선사양이 승인Spec과 동일한지 확인한다.	검사기준서 및 승인원	CHECK n=3 c=0	Lot	2	32	OK
		TRANS LINE FILTER 외관불량	1	외관검사	3	- 외관 파손, 변형 등 기타 유해한 사항이 있는지 확인한다. - PIN에 이물질 (황금) 및 SOLDERING 후 부식, 날단 (구리, 제조 MARK) 상태를 확인한다. - 도장 날인 (구리, 제조 MARK) 상태가 식별 할 수 있어야 하며 지워지지 않아야한다.	검사기준서 및 승인원	GII : 1.0	Lot	5	15	OK

2	준비작업 (HEAT SINK)	부품 파손	7	SCREW 체결 토크	1	4~5.5kg/cm	작업표준서	2회	일	5	35	CTQ	
		리드 설상	2	LEAD CUTTING 길이	3	3.5mm~5.0mm	작업표준서	5EA	LOT	5	30	-	
3	AUTO INSERTER	리드 미상	5	CLINCH 각도	2	AIXIAL : 15°~30° RADIAL : 5°~15° 들어짐 각도:35°~45°	작업표준서	2회	일	4	40	-	
				LEAD CUTTING 길이	2	1.5mm~1.8mm	작업표준서	2회	일	4	40	-	
				설비 AIR 압력	2	0.5±0.1MPA	작업표준서	2회	일	4	40	-	
4	SMD	부품 취부무	7	본딩 냉장 보관 온도	3	7±3°C	작업표준서	2회	일	4	84	-	
				본딩 DOTTING	3	1DOT : 1.5mm~1.6mm 2DOT : 0.7mm~0.8mm	작업표준서	2회	일	4	84	-	
				설비 AIR 압력	3	0.5±0.1MPA	작업표준서	2회	일	4	84	-	
			8	REFLOW 경화온도,시간	3	140°C±5°C, 110sec±10sec	작업표준서	2회	일	4	96	CTQ	
5	수삽1	미삽/역삽/오삽	7	CN801S H/S801S H/S803S	INLET MRJBC00818 DAC-18D3M H/S ASSY MBBA003522 D15XB60 GSIB15A60 H/S ASSY MBBA0035260 TK8A500 TKA8A50D MDF11N60	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				CY801S CY802S FP801S CX801S DP805 DP801	Y-CAP MQCAA02357 DA2GYB101KBC04 Y-CAP MQCAA02357 DA2GYB101KBC04 FUSE MRIAA008910 SS05-V-5 X-CAP MQDAF009020 436D 275V 0.1uF K 15 1760 GENERAL DIODE MPBAB000550 1N5408-09 GENERAL DIODE MPBAB000550 1N5408-09	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				H/S802S C9901 C9904	H/S802S MBBA0035230 FMEN-220A FCH20810 C-FILM MQDAB018580 C FL PCMT 468 4F104 C-FILM MQDAB018580 C FL PCMT 468 4F104	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				CP815S CP816S FOB CP815S,C	C-AL MQEAA095430 NZE 450V 68uF 16*35.5 1.5 RB- C-AL MQEAA095430 NZE 450V 68uF 16*35.5 1.5 RB- RTV MFAAB000940 RTV EA4100/WHITE	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
6	수삽2	미삽/역삽/오삽	7	VX801S LX801S LX802S CY803S CY804S CP801S CP801S CP802S CS801 C9903	VARISTOR MQBAH007950 WMR14D751KH3B3.5W-HK LINE FILTER MRBAM023380 SW05542BH LINE FILTER MRBAM023380 SW05542BH Y-CAP MQCAA024860 DCF471K34Y5PGGDLOEO Y-CAP MQCAA024860 DCF471K34Y5PGGDLOEO C-FILM MQDAF009210 46052W105K1785 C-FILM MQDAF009210 46052W105K1785 C-AL MQEAA065370 NZE 450V 22uF 10*33 105°C 3.2 C-FILM MQDAB018580 C FL PCMT 468 4F104	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				L801S Q9808 Q9806 Q9807 Q9805	NOMAL FILTER MQHAD013342 SW08030 FET MPCAE001130 TK8A50D FET MPCAE001130 TK8A50D FET MPCAE001130 TK8A50D FET MPCAE001130 TK8A50D	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				CS811 CS812 IC801S CY806S L801S Q9808 Q9806 Q9807 Q9805	NXB 16V 2200uF 10*25 3.2 LB- C-AL MQEAA095320 NXB 16V 2200uF 10*25 3.2 LB- IC PWM MPJAZ007750 STR2A153D Y-CAP MQCAA024870 DCF102M34Y5UGGDLOEO C-FILM MQDAF009210 46052W105K1785 C-AL MQEAA065370 NZE 450V 22uF 10*33 105°C 3.2 C-FILM MQDAB018580 C FL PCMT 468 4F104	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				CS811 CS812 IC801S CY806S L801S Q9808 Q9806 Q9807 Q9805	NXB 16V 2200uF 10*25 3.2 LB- C-AL MQEAA095320 NXB 16V 2200uF 10*25 3.2 LB- IC PWM MPJAZ007750 STR2A153D Y-CAP MQCAA024870 DCF102M34Y5UGGDLOEO C-FILM MQDAF009210 46052W105K1785 C-AL MQEAA065370 NZE 450V 22uF 10*33 105°C 3.2 C-FILM MQDAB018580 C FL PCMT 468 4F104	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
9	수삽5	미삽/역삽/오삽	7	NT801S RL801S C9832 C9818 C9831 C9817 LU801 C9902	THERMISTOR-NTC MQIAB004050 RELAY-POWER MRHAD000320 FTR-F3PA005V C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-
				C9818 C9831 C9817 LU801 C9902	C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- C-AL MQEAA095340 BH 250V 22uF 10*20 105°C DL- TERMINAL LUG MBDAE004510 HV32HD-9DY C-FILM MQDAB018580	3	작업 표준상 이상없을 것	작업표준서	전수	일	3	63	-

11	수습7	미삽/역삽/오삽	7	CNMB03 CONNECTOR MRJAK023840 SMAW200-H205Z CNLB04 CONNECTOR MRJAK021770 SMW200-02P CS802 C-FILM MJDAB01820 530S2K222J S/C L9804 TRANS MQHAD013360 MQHAD013360 L9803 TRANS MQHAD013360 MQHAD013360 L9802 TRANS MQHAD013360 MQHAD013360 L9801 TRANS MQHAD013360 MQHAD013360 CY805S Y-CAP MQCAA02484 DA2GYE222MBS04	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	63	-
12	수습8	미삽/역삽/오삽	7	LU806 TERMINAL LUG MBDAE004510 HV32HD-9DY LU804 TERMINAL LUG MBDAE004510 HV32HD-9DY PCS801S PHOTO-COUPLE MPDAF000530 LT817M-BN PCS802S PHOTO-COUPLE MPDAF000530 LT817M-BN PCM801S PHOTO-COUPLE MPDAF000530 LT817M-BN CM815 C-AL MQEAA095510 NZE 200V 100uF 12.5*30 105°C CNL802A CONNECTOR MRJAK023850 SMW200-H22CBF CM808S C-FILM MJDAB018560 C FL PCMP 384 S0222 CY807S Y-CAP MQCAA024840 DA2GYE222MBS04	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	63	-
13	수습9	미삽/역삽/오삽	7	TS801S MQGAH034700 MQGAH034700 LP801S PFC COIL MQHAD013320 MQHAD013320 TM802S TRANS MQGAH034670 MQGAH034670 TM801S TRANS MQGAH034580 MQGAH034580 CNL802B CONNECTOR MRJAK023860 SMW200-H18CBF	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	63	-
14	수습 겸사	돌뜸/미삽/역삽/오삽	7	돌뜸/미삽/역삽/오삽	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	63	-
15	AUTO SOLDERING	남땜 불량	8	예열 온도 CV Speed 남조온도	6	100°C±10°C 1.0~1.5m/min 255°C±5°C	SOLDERING CHECK SHEET SOLDERING CHECK SHEET SOLDERING CHECK SHEET	2회	일	4	192	CTQ
16	LEAD CUTTING	리드미삽	5	LEAD CUTTING 길이	4	1.5mm~2.5mm	작업 표준서	1회	2HR	4	80	-
17	TOUCH UP	동박불량 CHIP 부품 파손	4 6	인두 온도	3 2	380°C~400°C(돌뜸, 흙막침 수정) 335°C~355°C(FOR Insert) 305°C~325°C(FOR CHIP)	작업 표준서	1회	일	3	36	-
18	APT	미삽/역삽/오삽 OPEN/SHORT	7	PIN 수명 관리 MASTER SPL 유효성 검증 설비 AIR 압력	3 3 3	50,000회 1회/1일, 기종 별경시 1회 4.25Kg~4.75Kg	작업 표준서	1회	일	3	63	-
19	내압검사	내압 및 절연저항	10	내압조건 절연저항 조건	1	AC3.0KV 1.5sec 10mA 이상 일것 500VDC 1.0Sec 5MQ 이상일 것	작업 표준서	전수	일	1	10	-
20	1차 전압검사	출력전압	5	출력 전압	3	A5V	작업 표준서	전수	일	3	45	-
21	BONDING	부품정형불량	2	BONDING POINT 도포상태	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	18	-
22	BURN IN	출력전압	8	BURN IN 시간 BURN IN 온도 AC 일력 전압 출력 전압	4	- 24HR(20분 간격150 sec :ON 15sec, OFF 1sec) 30분 간격 LED 확인 - 45°C±5°C - 220V~230V - LED 확인시 이상 없을것	작업 표준서	전수	일	3	96	-
23	육안 검사	외관불량,조립상태	2	외관확인	4	작업 표준상 이상없을 것	작업 표준서	전수	일	4	32	-
24	소음,2차 전압검사	출력전압 소음불량	8 3	출력 전압 소음 여부	3 2	A5V 정쉬검사시 소음발생 없을것	작업 표준서	전수	일	2	48	CTQ
25	외관검사	외관불량	2	외관확인	4	작업 표준상 이상없을 것	작업 표준서	전수	일	4	32	-
26	포장	포장사양	4	BOX 규격사양 포장상태 BARCODE LABEL SCAN	3	작업 표준상 이상없을 것	작업 표준서	전수	일	3	36	-
27	출하검사	외관불량 출력전압 내전압 및 절연저항 소음불량 환경 유해물질	2 8 10 3 10	외관 및 시정수 확인 출력 전압 내압조건 절연저항 조건 소음확인 품목별 유해물질 확인	4 1 1 2 1	유해 결점이 없을것 A5V B5V B13V Vamp Vdr AC3.0KV 10mA 60sec 이상 없을것 DC 500V 60sec 5MQ 이상일 것 주파수 범위 50Hz~16KHz에서 소음측정 26dB 이하일 것 고객사 품목별 기준에 만족 할것	S-4 AQL=1.0 검사기준서 및 승인원 CHECK n=5 c=0 LOT	3 2 1 2 1	24 16 10 12 10	24 16 10 12 10	CTF	

PQCP Results

4	SMD	부품 취부무	분팅 냉장 보관 온도	7±3°C	2회	일	7.7도	7.7도									OK	
			분팅 DOTING령	1DOT : 1.5mm~1.6mm 2DOT : 0.7mm~0.8mm	2회	일	1(1.5mm) 2(0.7mm)	1(1.5mm) 2(0.7mm)									OK	
			설비 AIR 압력 REFLOW 경회온도,시간	0.5±0.1MPa 140°C±5°C, 110sec±10sec	2회	일	0.50Mpa 141°C 110초	0.50Mpa 142°C 110초									OK	
6	수삽1	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
7	수삽2	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
8	수삽3	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
9	수삽4	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
10	수삽5	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
11	수삽6	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
12	수삽7	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
13	수삽8	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
14	수삽9	미삽/역삽/오삽	미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
15	수삽검사	들뜸/미삽/역삽/오삽	들뜸/미삽/역삽/오삽	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			예열 온도	100°C±10°C	2회	일	100°C	100°C									OK	
16	AUTO SOLDERING	남锱 불량	C/V Speed	1.0~1.5m/min			1.3	1.3									OK	
			남조온도	255°C±5°C			256°C	255°C									OK	
17	LEAD CUTTING	리드미삽	LEAD CUTTING 길이	1.5mm~2.5mm	1회	2HR	2.0mm	2.2mm									OK	
					1회	일	381°C										OK	
18	TOUCH UP	동박불량 (chip 파손)	인두 온도	380°C~400°C(들뜸, 훈마침 설정) 335°C~355°C(FOR Insert) 305°C~325°C(FOR CHIP)			340°C										OK	
							315°C										OK	
19	APT	미삽/역삽/오삽 OPEN/SHORT	PIN 수령관리	50,000회	1회	일	ok										OK	
			MASTER SPL 유효성 검증	1회/1일, 기종 변경시 1회			ok										OK	
			설비 AIR 압력	4.25Kg~4.75Kg			4.30Kg										OK	
20	내압검사	내압 및 절연저항	내압조건 절연저항 조건	AC3.0KV 1.Sec 10mA 이상 일것 500VDC 1.0Sec 5MQ 이상일 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
21	1차 전압검사	출력전압	출력 전압	A5V	전 수	일	5.279	5.279	5.271	5.278	5.284	5.265	5.265	5.265	5.265	8.55	OK	
22	BONDING	부품정형불량	BONDING POINT 도포상태	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
23	BURN IN	출력전압	BURN IN 시간 BURN IN 온도 AC 입력 전압 출력 전압	- 24HR(20°C) 간격150 sec :ON 15sec, OFF 15sec) 30분 간격 LED 확인 - 45°C±5°C - 220V~230V - LED 확인시 이상 없을것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
24	육안 검사	외관불량	외관 확인	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
25	소음,2차 전압검사	출력전압	출력전압	A5V	전 수	일	5.256	5.256	5.251	5.244	5.244	5.240	5.246	5.253	5.240	5.246	8.55	OK
		소음불량	소음 여부 확인	청취검사시 소음발생 없을것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
27	외관검사	외관불량	외관확인	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
28	포장	포장사양	BOX 규격사양 포장상태 BARCODE LABEL SCAN	작업 표준상 이상없을 것	전 수	일	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
29	출하검사	외관불량	외관 및 시정수 확인	유해 결점이 없을것	S-4 AQL=1.0	LOT	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
		ASV	5.04~5.57V				5.272	5.252	5.272	5.276	5.258	5.279	5.268	5.271	5.278	5.284	6.53	OK
		B5V	5.04~5.57V				5.224	5.205	5.223	5.228	5.211	5.230	5.218	5.224	5.230	5.236	5.14	OK
		B13V	11.88~13.13V				12.941	12.900	12.986	12.859	12.965	12.912	12.904	12.965	12.869	12.926	1.89	OK
		Vamp	11.88~13.13V				12.918	12.881	12.849	12.894	12.969	12.894	12.895	12.968	12.856	13.028	1.80	OK
		Vdr	176.4~183.6mA				1.804	1.804	1.802	1.807	1.807	1.807	1.810	1.810	1.807	1.796	2.18	OK
		내압전압 및 절연저항	내압조건 절연저항 조건	AC 3.0KV 10mA 60sec 이상 없을것 DC 500V 60sec 5MQ 이상일 것			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
		소음불량	소음확인	주파수 범위 50Hz~16KHz에서 소음 측정 26dB 이하일 것			23.1	22.2	23.6	21.8	22.6						OK	
		환경유해물질	품목별 유해물질 확인	고객사 품목별 기준에 만족 할것			OK	OK	OK	OK	OK						OK	

PD46B2Q_CDY(522B) Cpk

상한치 SPEC	5.57	5.57	13.13	13.13	1.86
하한치 SPEC	5.04	5.04	11.88	11.88	1.76
시료 NO	항목1	항목2	항목3	항목4	항목5
1	5.254	5.208	12.882	12.871	1.790
2	5.270	5.218	12.882	12.920	1.808
3	5.263	5.214	12.917	12.904	1.808
4	5.265	5.219	12.909	12.901	1.814
5	5.251	5.205	12.882	12.871	1.808
6	5.281	5.233	12.952	12.920	1.802
7	5.281	5.235	12.950	12.933	1.809
8	5.256	5.207	12.886	12.870	1.802
9	5.258	5.210	12.932	12.924	1.809
10	5.283	5.235	12.932	12.924	1.804
11	5.272	5.224	12.941	12.918	1.804
12	5.252	5.205	12.900	12.881	1.804
13	5.272	5.223	12.986	12.849	1.802
14	5.276	5.228	12.859	12.894	1.807
15	5.258	5.211	12.965	12.969	1.807
16	5.279	5.230	12.912	12.894	1.807
17	5.268	5.218	12.904	12.895	1.810
18	5.271	5.224	12.965	12.968	1.810
19	5.278	5.230	12.869	12.856	1.807
20	5.284	5.236	12.926	13.028	1.796
21	5.265	5.219	12.926	12.849	1.798
22	5.280	5.232	12.926	12.849	1.800
23	5.268	5.221	12.965	12.953	1.797
24	5.281	5.235	12.950	12.933	1.810
25	5.256	5.207	12.886	12.870	1.796
26	5.258	5.210	12.932	12.924	1.796
27	5.283	5.235	12.932	12.924	1.810
28	5.272	5.224	12.941	12.918	1.790
29	5.252	5.205	12.900	12.881	1.808
30	5.272	5.223	12.986	12.849	1.808
31	5.276	5.228	12.859	12.894	1.808
32	5.268	5.218	12.904	12.895	1.810
33	5.271	5.224	12.965	12.968	1.790
34	5.278	5.230	12.869	12.856	1.808
35	5.284	5.236	12.926	12.849	1.807
36	5.265	5.219	12.926	12.849	1.808
37	5.280	5.232	12.926	12.849	1.810
38	5.268	5.221	12.965	12.953	1.810
39	5.281	5.235	12.950	12.933	1.807
40	5.256	5.207	12.886	12.870	1.808
41	5.258	5.210	12.932	12.924	1.796
42	5.283	5.235	12.932	12.924	1.808
43	5.286	5.238	12.949	12.885	1.808
44	5.266	5.216	12.896	12.885	1.812
45	5.288	5.241	12.949	12.940	1.812
46	5.294	5.247	12.859	12.975	1.797
47	5.283	5.235	12.909	12.894	1.806
48	5.287	5.240	12.896	12.940	1.794
49	5.291	5.244	13.014	12.885	1.805
50	5.295	5.248	12.981	12.978	1.797
시료수(n)	50	50	50	50	50
평균(Mean)	5.272	5.224	12.924	12.906	1.804
중앙값(Median)	5.272	5.224	12.926	12.898	1.807
표준편차(S.D)	0.012	0.012	0.036	0.042	0.006
최대값(Max)	5.295	5.248	13.014	13.028	1.814
최소값(Min)	5.251	5.205	12.859	12.849	1.790
Q_1 (1사분위수)	5.265	5.216	12.897	12.871	1.801
Q_3 (3사분위수)	5.281	5.235	12.950	12.930	1.808
Cp	7.453	7.387	5.717	5.003	2.582
Cpu	8.374	9.633	1.886	1.796	2.987
Cpl	6.533	5.140	9.548	8.209	2.178
Cpk	6.533	5.140	1.886	1.796	2.178
규격상한 추정불량	0.000	0.000	0.008	0.035	0.000
규격하한 추정불량	0.000	0.000	0.000	0.000	0.000
총 추정불량(PPM)	0.000	0.000	0.008	0.035	0.000

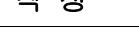
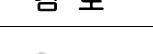
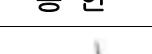
효과	효과의 심각도 평가 기준		점수
Hazardous: Without Warning	안전 혹은 정부 규제 조항에 예고 없이 저촉	May endanger operator. Failure mode affects safe vehicle operation and / or involves noncompliance with government regulation. Failure will occur WITHOUT warning.	10
Hazardous: With Warning	안전 혹은 정부 규제 조항에 예고와 함께 저촉	May endanger operator. Failure mode affects safe vehicle operation and / or involves noncompliance with government regulation. Failure will occur WITH warning.	9
Very High	주 기능 수행 불가	Major disruption to production line. 100% of product may have to be scrapped. Vehicle / item inoperable, loss of primary function. Customer very dissatisfied.	8
High	주 기능의 제한적 수행 고객 불만	Minor disruption to production line. Product may have to be sorted and a portion (less than 100%) scrapped. Vehicle operable, but at a reduced level of performance. Customer dissatisfied.	7
Moderate	편의 기능 수행 불가	Minor disruption to production line. A portion (less than 100%) may have to be scrapped (no sorting). Vehicle / item operable, but some comfort / convenience item(s) inoperable. Customers experience discomfort.	6
Low	편의 기능 제한적 수행	Minor disruption to production line. 100% of product may have to be reworked. Vehicle / item operable, but some comfort / convenience item(s) operable at reduced level of performance. Customer experiences some dissatisfaction.	5
Very Low	대부분 고객이 감지할 수 있는 마무리 결함	Minor disruption to production line. The product may have to be sorted and a portion (less than 100%) reworked. Fit / finish / squeak / rattle item does not conform. Defect noticed by most customers.	4
Minor	보통의 고객이 감지할 수 있는 마무리 결함	Minor disruption to production line. A portion (less than 100%) of the product may have to be reworked on-line but out-of-station. Fit / finish / squeak / rattle item does not conform. Defect noticed by average customers.	3
Very Minor	까다로운 고객이 감지 할 수 있는 마무리 결함	Minor disruption to production line. A portion (less than 100%) of the product may have to be reworked on-line but in-station. Fit / finish / squeak / rattle item does not conform. Defect noticed by discriminating customers.	2
None	아무 영향 없음	No effect.	1

실패 확률	불량률	Cpk	점수
Very High: Failure is almost inevitable (고장을 거의 피할 수 없음)	≥ 1 in 2	< 0.33	10
	1 in 3	≥ 0.33	9
High: Generally associated with processes similar to previous processes that have often failed (반복된 고장)	1 in 8	≥ 0.51	8
	1 in 20	≥ 0.67	7
Moderate: Generally associated with processes similar to previous processes previous processes which have experienced occasional failures, but not in major proportions (간혹 고장)	1 in 80	≥ 0.83	6
	1 in 400	≥ 1.00	5
	1 in 2,000	≥ 1.17	4
Low: Isolated failures associated with similar processes (비교적 고장 없음)	1 in 15,000	≥ 1.33	3
Very Low: Only isolated failures associated with almost identical processes	1 in 150,000	≥ 1.5	2
Remote: Failure is unlikely. No failures ever associated with almost identical	≤ 1 in 1,500,000	≥ 1.67	1

현재의 관리 및 검사방법으로 고장 및 그 원인을 탐지할 가능성		제품이 다음 공정으로 넘어가기 전에 검사방법이 불량을 찾아낼 확률	점수
Almost Impossible	탐지 불가	80% 미만	10
Very Remote	매우 희박함	80%	9
Remote	희박함	82.5%	8
Very Low	매우 낮음	85%	7
Low	낮음	87.5%	6
Moderate	보통	90%	5
Moderately High	보통 보다 높음	92.5%	4
High	높음	95%	3
Very High	매우 높음	97.5%	2
Almost Certain	거의 확실하게 탐지	99.5%	1

[PD46B2Q_CDY(BN44-00522B)]

< PV >

결 재	작 성	검 토	검 토	승 인	구분	담당자
			-			
	마영락 계장	지현재 과장	-	김태관 부장	회로	박노성K
					기구	박민균D
					기술	마영락G

검토 단계	전 단계		현 단계	
	검토 결과	검토 일자	확인 결과	확인 일자
EV	OK / NG	2011-08-31	OK / NG	
DV	OK / NG	2011-09-28	OK / NG	
PV	OK / NG		OK / NG	2011-11-05
PR	OK / NG		OK / NG	
SR	OK / NG		OK / NG	

■ 전 단계 문제점 개선 결과 검증

○ DV 단계

NO	문제점	대책과제	일정	담당	실행 유/무	비고
1	D9806, D9810S 냉납 Dummy Land 개선	Dummy Land 개선	10/04	연구 박노성K	有	
2	CY804S/RL801S Touch 발생	자재간 이격 거리 변경	10/04	연구 박노성K	有	
3	JP821.JP827 Short 발생우려	Jump pitch 변경	10/04	연구 박노성K	有	
4	CNL801A Short 발생	Dummy Land 개선	10/04	연구 박노성K	有	
5	CM12-CP811-CM13-CM10 자재 밀착 타입으로 인해 핀홀 불량 발생됨	부상 Type 자재 적용	10/04	연구 박노성K	有	

■ 부서별 주요 미결과제 및 추진 문제점

구 분	주요 ISSUE 사항	비 고
S M D	지적사항 없음	
자 삽	지적사항 없음	
P B A	지적사항 없음	
고객품질	지적사항 없음	
연구실	지적사항 없음	
제조 기술팀	PR 단계 검증결과 문제없음으로 판정됨	
자 재	초기 양산 MVT이후 양산자재 확보 예정(구매)	
기타	없음	

생산 진행 실적 [PV]

생산 완료일			2011-11-5	생산 수량	200ea	불량 수량	2ea	불량율	1.00%
검증 단계	항목	작성 부서	완료일	실적			개선율	판정	판정 기준
				지적건수	개선건	불가			
P V	설계 검증 SHEET	SMD (생산완료일-2일)	개발운영	2011-11-30	0건	0건	0건	-	OK / NG
		자삽 (생산완료일-2일)	개발운영	2011-11-30	0건	0건	0건	%	OK / NG
		PBA (생산완료일-2일)	개발운영	2011-11-30	0건	0건	0건	%	OK / NG
		표준 LIB. 준수율 (생산완료일-2일)	개발운영	2011-11-30	0건	0건	0건	%	OK / NG
		사출 (생산완료일+2일)	품질	-	-	-	-	%	OK / NG
	PLP CHECK SHEET	개발G (생산완료일+2일)	연구	2011-11-7	0건	0건	0건	%	OK / NG
		제조기술 (생산완료일+2일)	제기	2011-11-5	0건	0건	0건	%	OK / NG
		고객품질 (생산완료일+2일)	품질	2011-11-7	0건	0건	0건	%	OK / NG
	제조 공정 대응력 분석	제기	2011-11-1	0건	0건	0건	%	OK / NG	이상없음
	검출력 (생산완료일+2일)	제기	2011-11-7	0건	0건	0건	%	OK / NG	이상없음
P V	SOLDERING 결점율 (생산완료일+2일)	제기	2011-11-3	0건	0건	0건	%	OK / NG	PV : 211ppm
	실패사례 CHECK SHEET (생산완료일+2일)	제기	2011-11-5	0건	0건	0건	%	OK / NG	이상없음
	CPK DATA (생산완료일+2일)	제기	2011-11-5	1.67↑	-	-	%	OK / NG	Cpk : 6.53
	2점 정합 (생산일+3일)	제기	2011-11-7	0건	0건	0건	%	OK / NG	이상없음
	4점 정합 (생산완료일-3일)	제기	2011-11-1	0건	0건	0건	%	OK / NG	이상없음
	공정불량 검토서 (생산완료일+3일)	연구	2011-11-5	0건	0건	0건	%	OK / NG	이상없음
	부품 STRESS 분석 SHEET (생산완료일+2일)	연구	2011-11-7	0건	0건	0건	%	OK / NG	이상없음
	사양 부품 검증 SHEET (생산완료일+2일)	부품	2011-11-7	0건	0건	0건	%	OK / NG	이상없음
	생산 준비 Schedule	제기	2011-11-3	0건	0건	0건	%	OK / NG	이상없음
	생산성 검증	생산성 분석	제기	2011-11-3	0건	0건	0건	%	OK / NG
		자동화	제기	2011-11-3	0건	0건	0건	%	OK / NG
수율		제조	2011-11-5	누적수율(RTY) : 99%				OK / NG	이상없음

우수 사례

부진 사례

■ 부서별 주요 미결과제 및 추진 문제점

구 분	주요 ISSUE 사항	비 고
S M D	지적사항 없음	
자 삽	지적사항 없음	
P B A	지적사항 없음	
고객품질	지적사항 없음	
연구실	문제없음	
제조 기술팀	PR 단계 개선 PCB File 검증결과 문제없음으로 판정됨	
자 재	초기 양산 PR 이후 양산자재 확보 예정(구매)	
기타	없음	

■ 시양산 주요 문제 L I S T

제품구분		PD46B2Q_CDY(BN44-00522B)							
작성자		부서명 : 제조 기술 성명 : 마영락							
NO	등록부서	문제점	대책 사항	현상	개선일정			담당	비고
					Artwork	1차 점검	2차 점검		
1	제조 기술	R9888-JP869 자재 금지 구역내 자재 설정됨	자재 위치 이동		11/07	11/09	PCB 발주 전 확인	연구 박노성K	完
2	제조 기술	IC9804-IC9811 SHORT 발생	1. IC9804-9811 Dummy LAND 변경 2. 듀로스톤 JIG 개선		11/07	11/09	PCB 발주 전 확인	연구 박노성K	完
3	제조 기술	BBP803-CP802S 터치됨	BBP803 자재 위치 이동 요망		11/07	11/09	PCB 발주 전 확인	연구 박노성K	完
4	제조 기술	ICS803 SHORT 발생됨 → ICS803 자재 뒷면 각을 추가로 인해 납 흐름 원활 하지 않음	Dummy Land 추가 요망 → 자재 이동 및 더미랜드 추가		11/07	11/09	PCB 발주 전 확인	연구 박노성K	完

■ 현단계 현물 품평회 진행 결과

구 분	문제 POINT	개선방안	일정	담당	비 고
S M D	지적사항 외 문제없음	-	-	-	-
자 삽	지적사항 외 문제없음	-	-	-	-
P B A	지적사항 외 문제없음	-	-	-	-
고객품질	지적사항 외 문제없음	-	-	-	-
연구실	지적사항 외 문제없음	-	-	-	-
제조 기술팀	지적사항 외 문제없음	-	-	-	-
자 재	지적사항 외 문제없음	-	-	-	-
기타	지적사항 외 문제없음	-	-	-	-

■ 작업표준, 검사표준(IQC, 공정, OQC) 검증

구 분	문제 POINT	개선방안	일정	담당	비 고
문서 승인 유무	문서 승인 결재완료	-	11/01	마영락G	-
REV' NO	REV 1.0	-	11/01	마영락G	-
오타, 내용누락	없음	-	11/01	마영락G	-
손망실(훼손)	문제없음	-	11/01	마영락G	-
임의조작(수정)	문제없음	-	11/01	마영락G	-
배포처 합의	내부 결제 후 관련부서 배포 완료	-	11/01	마영락G	-
작업자 교육	현장 작업자 교육 실시함	-	11/01	마영락G	-
현장 비치	작업지도서, SPL 현장비취 완료	-	11/01	마영락G	-
기타	-	-	-	-	-

■ 단계별 변경 이력사항 점검

진행단계	변경 내용	사양변경 및 표준 반영	적용일	확인	비고
ES					
DV					
PV					
PR					

DC VSS 신 Model MVT

■ ITEM : PD46B2Q_CDY
(BN44-00522B)

동양 E&P

2011.11.15

Samsung Electronics

NO	항목	점검내용	결과	점검 내용 및 문제점	비고
1	DR 협의	1.1 자체 시양산 후 DR 협의를 실시하는가 ?	OK	주관 : 제조기술 , 협의실시 : 11월 05일 실시(품평회 동시 실시)	
		1.2 DR 협의시 관련부문(개발, 제기, 제조, 품질)은 100% 참석 하는가 ?	OK	제기 (마영락G), 개발운영(권주영G), 품질(양일모G), 연구소(박노성K), 생산(박수철G)	
		1.3 DR 협의시 적용되는 점검 SHEET는 적정한가 ?	OK	설계검증 SHEET(SMD,자삼,PBA)외 12항목	
		1.4 단계별 DR 점검시 전회 거론된 문제는 100% 개선되었는가 ?	OK	DV 단계 문제점 5件 – 문제점 개선 완	
		1.5 단계별 DR 점검시 반복 발생되는 문제는 없는가 ?	OK	반복 문제 없음.	
		1.6 PCB 설계는 최신 REV'으로 적용/검증되고 있는가 ?	OK	Rev 0.8 2011.10.27 PCB Siih 적용	
		1.7 PCB ASS'Y에 대한 현물 품평회를 실시하는가 ?		품평회(11/05 평택 품평회 진행), 문제점 4건	
		1.8 DR 협의시 작업표준에 대한 검증이 이루어 지는가 ?	OK	작업지도서 제정 완료(수삼,후가공,조립 및 검사 표준) -> 11/01 품질/제조/연구소 협의	
		☆ 단계별 문제점에 대한 세부 점검은 "자체DR점검 SHEET" 참조			
2	작업표준	2.1 제조공정도 및 작업지도서는 제정되어 활용되고 있는가?	OK	작업지도서(DYS-작업-46BQ-01) 제조공정도(DYS-공정-46BQ-01)	
		2.2 작업지도서에는 사용설비, Program, 자재 규격 등이 명기되어 있는가?	OK	사용설비 : APT장비, 치공구명 등 기록 자재규격 : CY803S (Y-CAP MQCAA024860 DCF471K34Y5PG6DLOEO)	
		2.3 작업지도서는 각각의 공정별로 분류하여 작성하고 있는가?	OK	수삼(10공정), 후가공(8공정), 조립검사(4공정)	
		2.4 작업지도서는 제, 개정시 책임자에(제조부서장) 의해 승인되고 있는가?	OK	승인(제조기술팀장), 협의(제조팀장)	
		2.5 작업지도서는 Revision No 및 Revision History가 관리되고 있는가?	OK	REV0.0 / 신규	
		2.6 작업지도서는 쉽게 찾을 수 있도록 Index 처리되어 보관하고 있는가?	OK	ISO 문서관리규정 적용(품질목록 색인표)	
		2.7 공정검사 표준은 작성되어 있는가?	OK	검출력(APT, 1차, 내압, 2차, BURN IN, 소음/실장) 외관 : PBA 공정/조립 및 검사공정의 육안검사 표준	
		2.8 주요부품에 대한 수입검사 기준서는 작성되어 있는가?	OK	작성 완료(추가: 검사 품목, 관리검사, 대상품목 기준서 완료수) EX) 수입검사항목 (DYS-D50-1006-04) 외 3개항목 <97.11.01>REV:0	관리검사: 157 EA 수입검사: 15 EA
		2.9 출하검사 기준서는 작성되어 있는가?	OK	출하 검사 기준서 작성 완료(VD-12-06)	출하 검사
3	실패사례	3.1 자체 실패사례 검증 CHECK SHEET가 작성되어 있는가?	OK	DY 실패사례 표준 작성 운영(REV 56)	
		3.2 최근 ISSUE 과제들은 UP DATA 반영되어 있는가?	OK	ISSUE 사항 없음	
		3.3 실패사례 항목별/부문별 100% 검증이 이루어지는가?	OK	DY 실패사례 TO220 TYPE 동박불량/분당실시자 55항목에 대한 검증 완료	
		3.4 실패사례 검증 결과에 대한 현물 반영은 일치하는가?	OK	11/05 현물 품평회 검토 결과 실패사례와 일치하는 설계 없음.	
		3.5 이면취부, TOUCH UP POINT등 품질 LEAK POINT는 없는가?	OK	특이사항 없음	
4	생산준비	4.1 MVT 생산 관련 자재는 100% 승인되어 있는가?	-	사양품 외 모든자재 승인 완료 (사양품-제품승인 이전 완료예정)	연구소
		4.2 MVT 생산 관련 자재는 100% 준비되어 있는가?	OK	11/01 생산처 입고 완료	
		4.3 제조공정도에 준한 표준이 현장에 비치되어 있는가?	OK	각 공정별(PBA 수삼 ->조립검사) 작업지도서 비치되어 운영됨	
		4.4 공정내 설비, 계측기등 SETTING이 완료되어 있는가?	OK	자삼기,SMD(프로그램외),자동납땜기,검출력 공정 JIG류 Setting 완료	
		4.5 검사용 JIG(CT, BURN IN LOAD, FT#1, FT#2)는 준비되어 있는가?	OK	ICT FIXTURE(제품 양산전 제작 진행) 외 지그 제작 완료	
		4.6 검사공정별 DUMMY SPL은 제작, 비취되어 있는가?	OK	공정별 표준(양품)시료 1EA, 소음검사 불량 1EA, FT# 불량 2EA(전압 상승/하락), 내압 불량 2EA(내전압 불량 / 절연 저항 불량)	
		4.7 ICT JIG 반복(20개×100회) TEST로 MLCC Crack 검증은 되었는가?	OK	점검결과 이상없음	
5	품질 ISSUE	5.1 고객 요구사항은 누락없이 반영되어 있는가?	OK	NC 검출력 확보.	
		- DC VSS PCB 설계 GUIDE	OK	1) DC VSS PCB 설계 GUIDE -> 동양 PCB설계 표준 반영되어 관리 2) DC VSS GUIDE LINE DC VSS GUIDE 라인 Check List -Safety Checklist -Insulation Distance -PLP Checklist -PBA Checklist	연구소
		- 업체 정예화 대상업체 배제 : R/C	OK	규격 부품 및 정예화 업체 사용	연구소
		- MULTI BOM 업체 등록, 비교 TEST 검증	OK	이원화 업체 비교 검증 완료	연구소
		- 원자재 업체 선행관리	OK	관리함	연구소
		- BURN IN 조건 강화	OK	24HR (20분간격 ON/15초, OFF/15초 150초간)	
		- PROGRAM LOAD 적용	-	해당사항 없음	
6	선행품질	- 소음 관능검사 JIG 제작 및 운용(DUMMY SPL 확보)	OK	소음검사 JIG 제작 진행 중 (양산 전 완료예정)	
		6.1 사용 부품은 승인 부품과 일치하며 규격을 만족하는가?	OK		연구소
		6.2 Solder 상태는 양호하며 Touch 가능성은 없는가?	OK		연구소
		6.3 대형부품 및 주요 전원 부품에는 Eyelet 적용되었는가?	OK		연구소
		6.4 FUSE 가용소체 냉남방지 접합 방식을 적용되었는가?	OK		연구소
		6.5 상대물 조립시 흠 및 Touch은 발생되지 않는가?	-	해당 사항 없음	연구소
		6.6 유해물질은 검증은 이루어 졌는가?	OK		연구소
		6.7 규정된 신뢰성 시험을 실시하였는가?	OK		연구소
		6.8 신뢰성 시험시 규정된 기준을 만족 하는가?	OK		연구소

★ 기타 공정 PROCESS 부문은 기존 QPA CHECK LIST에 준하여 점검 실시

■ 자체 시양산 DR 점검 결과

단계/생산수	수량	공정	불량수	불량율	주요문제점	대책	개선실행 유/무	개선율
ES	100EA	-	0	%				
DV	200EA	-	0	%	CNL801A Short 발생	Dummy LAND 변경	유	100%
PV	200EA	SMD 자삽 수삽 후가공 조립/검사	0 0 0 2 0	% % % 1% %	IC9804--9811 SHORT 발생	Dummy LAND 변경 	유	100%
	TOTAL							

*불량 세부내역은 수리일보 참조

구 분	항 목	관리 POINT	결과반영
공정능력	CTF	1. 출력전압 A5V B5V B13V Vamp Vdrv	CPK 6.53 5.14 1.89 1.80 2.18
		수입검사) Trans, L/F, Coil L값	- 시료수: 50EA MQGAH034580: L값 이상무, Cpk 1.85 MQGAH034670: L값 이상무, Cpk 1.89 MQGAH034700: L값 이상무, Cpk 1.69 MQHAD013320: L값 이상무, Cpk 1.82 MQHAD013342: L값 이상무, Cpk 3.92 MQHAD013360: L값 이상무, Cpk 1.71 MRBAM023380: L값 이상무, Cpk 1.99
	CTQ	전동드라이버(SCREW 제결 토르크)	주기 2회/일 , 결과 : 1) 5.20 2) 5.15
		SMD Reflow 온도	주기 2회/일 , 결과 : 1) 140도 2) 141도 110초 110초
		Wave Soldering공정(Soder Pot 온도) FT#2(Final 전압검사) 공정(A5V)	주기 2회/일 , 결과 : 1) 258도 2) 257도 주기 (전수) , 결과 : CPK 6.53 만족
MVT 수율	누적수율(RTY)	ICT : 198EA / 200EA(99%) F#1 : 198EA / 198EA(100%) B/I : 198EA / 198EA(100%) F#2: 198EA / 198EA(100%)	누적수율(RTY) : 99%

검사 공정 CPK DATA SHEET

Model : PD46B2Q_CDY

PCB명 : REV 0.8

단 계 : PV

검증시료: 50ea

검토일시: 2011.11.05

결 재	작 성	검 토	검 토	승 인
전 자 결 제				



▣ 검토 결과

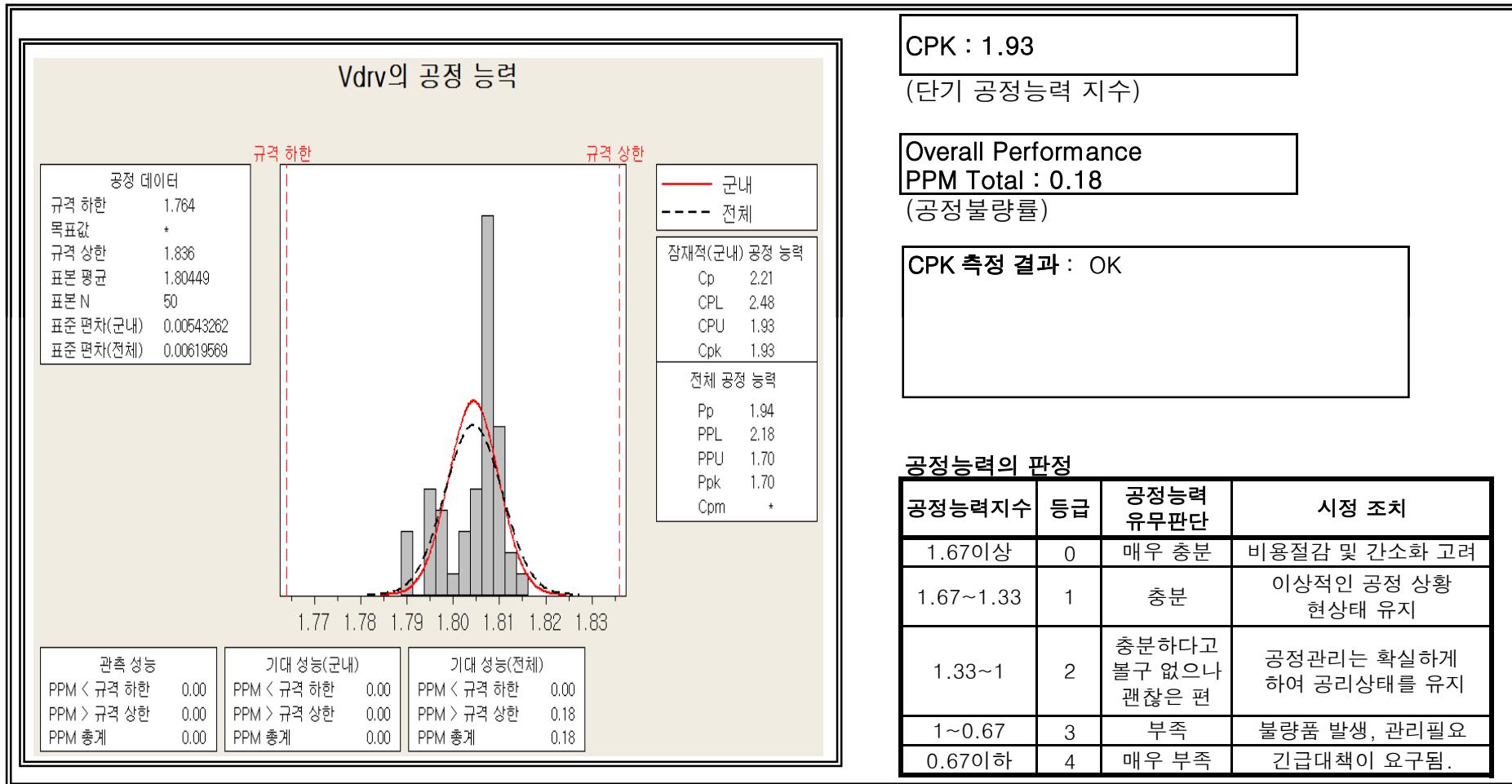
- 1) CPK 산출결과 값은 1.67 이상 이어야 함.
- 2) CPK 기준치 이하의 다음단계 진행 여부를 명확히 기제 함.

검토 단계	ES	DV	PV	PR	SR	비고(계)
검 토 일			2011.11.05			
최소값			1.93			
측정 건수			50			
문제 건수			0			
진행 여부			OK			

배포처 :

DONG YANG E&P

최소값 CPK DATA



CHECK DATA SHEET

Date :	2011.11.05
Line :	A LINE
Name :	마영락
M/C No:	HATA 580
Model :	PD46B2Q CDY

	DC_VSS	SPEC		
A5V	5.57	5.04		
B5V	5.57	5.04		
B13V	13.13	11.88		
Vamp	13.13	11.88		

A-StepNo	1	2	3	4	1	2	3	4	1	2	3	4	
	A-Caption	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp
A-Upper	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	
A-Lower	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	
A-Unit	V	V	V	V	V	V	V	V	V	V	V	V	
S/NO	90V MIN			90V TYP			90V MAX						
1	5.184	5.267	12.334	12.334	5.362	5.318	12.929	12.913	5.245	5.174	12.979	12.863	
2	5.207	5.286	12.434	12.328	5.376	5.332	12.895	12.884	5.241	5.173	12.945	12.934	
3	5.196	5.278	12.382	12.335	5.367	5.322	12.885	12.869	5.258	5.179	12.935	12.919	
4	5.212	5.266	12.429	12.350	5.372	5.326	12.907	12.889	5.241	5.190	12.957	12.939	
5	5.191	5.269	12.337	12.320	5.359	5.313	12.892	12.870	5.245	5.183	12.942	12.920	
6	5.213	5.178	12.499	12.364	5.389	5.344	12.887	12.878	5.241	5.224	12.937	12.928	
7	5.215	5.277	12.472	12.369	5.389	5.345	12.896	12.870	5.240	5.179	12.946	12.920	
8	5.196	5.253	12.397	12.316	5.362	5.317	12.936	12.914	5.245	5.225	12.986	12.964	
9	5.201	5.255	12.365	12.278	5.364	5.318	12.856	12.849	5.236	5.199	12.979	12.899	
10	5.229	5.283	12.435	12.349	5.389	5.344	12.905	12.898	5.245	5.213	12.955	12.948	
11	5.221	5.275	12.440	12.336	5.378	5.333	12.832	12.835	5.248	5.201	12.986	12.885	
12	5.197	5.251	12.375	12.331	5.358	5.313	12.914	12.903	5.257	5.213	12.964	12.953	
13	5.222	5.281	12.476	12.370	5.378	5.334	12.866	12.858	5.250	5.201	12.916	12.908	
14	5.223	5.282	12.460	12.371	5.382	5.333	12.916	12.900	5.248	5.224	12.966	12.950	
15	5.203	5.263	12.416	12.330	5.367	5.321	12.911	12.889	5.246	5.204	12.961	12.939	
16	5.216	5.270	12.415	12.366	5.383	5.339	12.882	12.858	5.168	5.271	12.932	12.908	
17	5.215	5.272	12.451	12.374	5.374	5.328	12.866	12.860	5.252	5.224	12.916	12.910	
18	5.221	5.279	12.481	12.363	5.376	5.333	12.912	12.894	5.243	5.216	12.962	12.944	
19	5.225	5.273	12.409	12.326	5.385	5.336	12.854	12.831	5.252	5.240	12.904	12.980	
20	5.232	5.290	12.520	12.403	5.391	5.346	12.929	12.905	5.245	5.215	12.979	12.955	
21	5.209	5.269	12.387	12.284	5.370	5.326	12.825	12.805	5.258	5.221	12.875	12.980	
22	5.221	5.280	12.384	12.379	5.388	5.342	12.765	12.765	5.246	5.200	12.979	12.931	
23	5.220	5.277	12.485	12.390	5.377	5.333	12.879	12.861	5.235	5.191	12.929	12.911	
24	5.219	5.277	12.471	12.373	5.375	5.329	12.896	12.881	5.231	5.239	12.946	12.931	
25	5.225	5.285	12.470	12.408	5.384	5.341	12.930	12.911	5.231	5.180	12.980	12.961	
26	5.216	5.270	12.401	12.395	5.376	5.329	12.769	12.881	5.232	5.193	12.980	12.928	
27	5.219	5.280	12.441	12.378	5.380	5.332	12.887	12.878	5.235	5.184	12.937	12.928	
28	5.229	5.266	12.529	12.439	5.389	5.342	12.936	12.923	5.223	5.161	12.986	12.973	
29	5.215	5.269	12.477	12.476	5.374	5.327	12.926	12.924	5.250	5.205	12.976	12.974	
30	5.203	5.263	12.416	12.330	5.385	5.336	12.854	12.831	5.245	5.225	12.986	12.964	
31	5.216	5.270	12.415	12.366	5.391	5.346	12.929	12.905	5.236	5.199	12.979	12.899	
32	5.215	5.272	12.451	12.374	5.370	5.326	12.825	12.805	5.245	5.213	12.955	12.948	
33	5.221	5.279	12.481	12.363	5.388	5.342	12.887	12.753	5.248	5.201	12.986	12.885	
34	5.225	5.273	12.409	12.326	5.377	5.333	12.879	12.861	5.257	5.213	12.964	12.953	
35	5.219	5.277	12.471	12.373	5.375	5.329	12.896	12.881	5.235	5.184	12.937	12.928	
36	5.225	5.285	12.470	12.408	5.384	5.341	12.930	12.911	5.223	5.161	12.986	12.973	
37	5.216	5.270	12.401	12.395	5.376	5.329	12.944	12.753	5.250	5.205	12.976	12.974	
38	5.219	5.280	12.441	12.378	5.380	5.332	12.887	12.878	5.245	5.225	12.986	12.964	
39	5.229	5.266	12.529	12.439	5.389	5.342	12.936	12.923	5.236	5.199	12.979	12.899	
40	5.215	5.269	12.477	12.476	5.369	5.325	12.944	12.934	5.245	5.213	12.955	12.948	
41	5.195	5.247	12.397	12.365	5.358	5.311	12.952	12.953	5.258	5.201	12.957	12.984	
42	5.210	5.271	12.426	12.373	5.369	5.325	12.944	12.934	5.248	5.215	12.994	12.984	
43	5.215	5.279	12.430	12.360	5.381	5.335	12.907	12.890	5.231	5.171	12.957	12.940	
44	5.226	5.271	12.437	12.436	5.392	5.347	12.874	12.861	5.257	5.191	12.924	12.911	
45	5.215	5.273	12.472	12.395	5.373	5.325	12.960	12.943	5.236	5.171	12.924	12.993	
46	5.224	5.284	12.455	12.423	5.395	5.347	12.884	12.879	5.250	5.176	12.986	12.929	
47	5.243	5.303	12.510	12.446	5.401	5.355	12.940	12.930	5.243	5.214	12.990	12.980	
48	5.217	5.275	12.476	12.475	5.390	5.345	12.982	12.968	5.251	5.215	12.924	13.018	
49	5.227	5.283	12.475	12.480	5.394	5.347	12.945	12.930	5.253	5.168	12.995	12.980	
50	5.234	5.291	12.479	12.498	5.399	5.352	12.946	12.926	5.222	5.164	12.996	12.976	
평균(Mean)		5.22	5.27	12.44	12.38	5.38	5.33	12.90	12.88	5.24	5.20	12.96	12.94
표준편차		0.01	0.02	0.05	0.05	0.01	0.04	0.04	0.02	0.01	0.03	0.03	0.03
범위(Range)		0.06	0.12	0.19	0.22	0.04	0.04	0.22	0.22	0.09	0.11	0.12	0.13
규격상한(USL)		5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13
규격하한(LSL)		5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88
UCL(Xbar+3σ)		5.25	5.32	12.58	12.53	5.41	5.37	13.03	13.02	5.28	5.27	13.04	13.04
UCL(Xbar+4σ)		5.18	5.22	12.30	12.23	5.35	5.30	12.76	12.75	5.20	5.13	12.88	12.85
UCL(Xbar+5σ)		7.59	5.16	4.54	4.14	8.19	8.26	4.68	4.69	6.28	3.86	7.62	6.85
UCL(Xbar+6σ)		10.13	5.78	5.00	4.98	5.91	7.37	1.73	1.85	7.77	5.38	2.08	2.04
UCL(Xbar+7σ)		5.04	4.54	4.09	3.30	10.48	9.14	7.62	7.53	4.78	2.34	13.16	11.66
PPK		5.04	4.54	4.09	3.30	5.91	7.37	1.73	1.85	4.78	2.34	2.08	2.04

CHECK DATA SHEET

Date :	2011.11.05
Line :	A LINE
Name :	마영학
M/C No:	HATA 580
Model :	D46B2Q_CDY

A-StepNo	110V MIN				110V TYP				110V MAX			
	1	2	3	4	1	2	3	4	1	2	3	4
A-Caption	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp
A-Upper	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13
A-Lower	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88
A-Unit	V	V	V	V	V	V	V	V	V	V	V	V
S/NO	110V MIN				110V TYP				110V MAX			
1	5.203	5.255	12.322	12.298	5.237	5.226	12.916	12.881	5.243	5.179	12.929	12.894
2	5.224	5.290	12.422	12.353	5.259	5.242	12.884	12.878	5.239	5.178	12.896	12.890
3	5.218	5.279	12.379	12.349	5.218	5.234	12.880	12.870	5.257	5.184	12.892	12.882
4	5.229	5.259	12.422	12.345	5.230	5.238	12.897	12.895	5.239	5.195	12.910	12.907
5	5.210	5.276	12.341	12.346	5.231	5.225	12.887	12.873	5.243	5.188	12.900	12.885
6	5.231	5.175	12.460	12.364	5.262	5.253	12.882	12.873	5.239	5.229	12.895	12.885
7	5.233	5.276	12.447	12.426	5.270	5.255	12.891	12.863	5.238	5.184	12.904	12.875
8	5.214	5.254	12.407	12.351	5.227	5.229	12.927	12.914	5.243	5.230	12.940	12.926
9	5.214	5.255	12.339	12.313	5.140	5.228	12.857	12.850	5.234	5.204	12.870	12.862
10	5.241	5.290	12.440	12.353	5.264	5.254	12.895	12.884	5.243	5.218	12.907	12.896
11	5.235	5.279	12.391	12.329	5.256	5.240	12.845	12.831	5.247	5.206	12.857	12.844
12	5.215	5.259	12.446	12.330	5.236	5.222	12.920	12.904	5.255	5.218	12.932	12.916
13	5.239	5.276	12.455	12.404	5.247	5.244	12.874	12.851	5.248	5.206	12.886	12.864
14	5.242	5.278	12.442	12.425	5.175	5.246	12.911	12.898	5.247	5.229	12.924	12.910
15	5.217	5.263	12.384	12.323	5.235	5.230	12.889	12.881	5.244	5.209	12.901	12.894
16	5.240	5.273	12.421	12.401	5.231	5.249	12.872	12.864	5.167	5.276	12.885	12.876
17	5.229	5.272	12.417	12.346	5.127	5.240	12.874	12.854	5.250	5.229	12.886	12.866
18	5.237	5.276	12.436	12.366	5.246	5.244	12.890	12.886	5.242	5.221	12.902	12.899
19	5.238	5.282	12.415	12.333	5.244	5.248	12.851	12.838	5.250	5.245	12.864	12.850
20	5.251	5.289	12.495	12.449	5.256	5.252	12.917	12.908	5.243	5.220	12.930	12.920
21	5.223	5.260	12.339	12.315	5.231	5.236	12.834	12.809	5.257	5.226	12.846	12.821
22	5.245	5.285	12.457	12.350	5.256	5.254	12.831	12.811	5.244	5.205	12.844	12.824
23	5.237	5.272	12.457	12.439	5.246	5.238	12.867	12.864	5.233	5.196	12.880	12.876
24	5.233	5.276	12.409	12.345	5.241	5.240	12.901	12.889	5.229	5.244	12.914	12.901
25	5.241	5.282	12.462	12.431	5.250	5.251	12.926	12.904	5.229	5.185	12.939	12.916
26	5.232	5.277	12.407	12.345	5.250	5.240	12.779	12.768	5.230	5.198	12.791	12.780
27	5.229	5.272	12.417	12.346	5.253	5.242	12.891	12.874	5.233	5.189	12.904	12.886
28	5.237	5.276	12.436	12.366	5.241	5.252	12.926	12.918	5.222	5.166	12.939	12.930
29	5.238	5.282	12.415	12.333	5.252	5.236	12.924	12.908	5.248	5.210	12.936	12.920
30	5.251	5.289	12.495	12.449	5.231	5.225	12.887	12.873	5.243	5.179	12.929	12.894
31	5.223	5.260	12.339	12.315	5.262	5.253	12.882	12.873	5.239	5.178	12.896	12.890
32	5.245	5.285	12.457	12.350	5.270	5.255	12.891	12.863	5.257	5.184	12.892	12.882
33	5.233	5.276	12.409	12.345	5.227	5.229	12.927	12.914	5.239	5.195	12.910	12.907
34	5.241	5.282	12.462	12.431	5.140	5.228	12.857	12.850	5.243	5.188	12.900	12.885
35	5.232	5.277	12.407	12.345	5.264	5.254	12.895	12.884	5.239	5.229	12.895	12.885
36	5.229	5.272	12.417	12.346	5.241	5.240	12.901	12.889	5.238	5.184	12.904	12.875
37	5.251	5.289	12.495	12.449	5.250	5.251	12.926	12.904	5.239	5.178	12.896	12.890
38	5.223	5.260	12.339	12.315	5.250	5.240	12.779	12.768	5.257	5.184	12.892	12.882
39	5.245	5.285	12.457	12.350	5.253	5.242	12.891	12.874	5.239	5.195	12.910	12.907
40	5.237	5.272	12.457	12.439	5.241	5.252	12.926	12.918	5.243	5.188	12.900	12.885
41	5.233	5.276	12.409	12.350	5.252	5.236	12.924	12.908	5.239	5.229	12.895	12.885
42	5.235	5.270	12.416	12.414	5.231	5.225	12.887	12.873	5.247	5.220	12.951	12.940
43	5.232	5.268	12.417	12.388	5.256	5.244	12.896	12.891	5.229	5.176	12.909	12.904
44	5.244	5.285	12.455	12.416	5.274	5.257	12.871	12.865	5.255	5.196	12.884	12.877
45	5.232	5.268	12.417	12.388	5.236	5.236	12.956	12.934	5.234	5.176	12.969	12.946
46	5.244	5.285	12.455	12.416	5.263	5.259	12.894	12.875	5.248	5.181	12.906	12.887
47	5.259	5.298	12.481	12.479	5.254	5.264	12.941	12.926	5.242	5.219	12.954	12.939
48	5.240	5.286	12.521	12.414	5.247	5.255	12.982	12.975	5.249	5.220	12.995	12.987
49	5.248	5.288	12.515	12.466	5.271	5.257	12.934	12.926	5.252	5.173	12.946	12.939
50	5.259	5.301	12.556	12.448	5.262	5.265	12.944	12.931	5.220	5.169	12.956	12.944
평균(Mean)	5.23	5.27	12.43	12.38	5.24	5.24	12.89	12.88	5.24	5.20	12.91	12.89
표준편차	0.01	0.02	0.05	0.05	0.03	0.01	0.04	0.04	0.01	0.02	0.03	0.03
범위(Range)	0.06	0.13	0.23	0.18	0.15	0.04	0.20	0.21	0.09	0.11	0.20	0.21
규격상한(USL)	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13
규격하한(LSL)	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88
UCL(Xbar+3σ)	5.27	5.33	12.58	12.52	5.33	5.28	13.01	12.99	5.28	5.27	13.01	13.00
UCL(Xbar+4σ)	5.20	5.22	12.28	12.23	5.15	5.21	12.78	12.76	5.20	5.13	12.80	12.79
UCL(Xbar+5σ)	7.28	4.89	4.21	4.35	2.82	7.94	5.41	5.39	6.46	3.75	6.10	6.02
UCL(Xbar+6σ)	9.23	5.46	4.72	5.24	3.52	9.80	2.06	2.17	8.03	5.21	2.19	2.29
UCL(Xbar+7σ)	5.34	4.32	3.70	3.45	2.13	6.08	8.77	8.62	4.88	2.29	10.02	9.75
PPK	5.34	4.32	3.70	3.45	2.13	6.08	2.06	2.17	4.88	2.29	2.19	2.29

CHECK DATA SHEET

Date :	2011.11.05
Line :	A LINE
Name :	마영락
M/C No:	HATA 580
Model :	D46B2Q_CDY

A-StepNo	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
A-Caption	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp	Vdr(100%)	Vdr(10%)	
A-Upper	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	1.836	0.1836	
A-Lower	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	1.764	0.1764	
A-Unit	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
S/NO	220V MIN				220V TYP				220V MAX				Vdrv TYP		
1	5.198	5.155	12.370	12.259	5.254	5.208	12.882	12.871	5.239	5.184	12.878	12.867	1.790	0.180	
2	5.211	5.174	12.367	12.379	5.270	5.218	12.882	12.920	5.235	5.183	12.878	12.916	1.808	0.179	
3	5.202	5.160	12.344	12.309	5.263	5.214	12.917	12.904	5.253	5.189	12.913	12.900	1.808	0.180	
4	5.211	5.172	12.361	12.360	5.265	5.219	12.909	12.901	5.235	5.200	12.904	12.897	1.814	0.180	
5	5.197	5.155	12.379	12.256	5.251	5.205	12.882	12.871	5.239	5.193	12.878	12.867	1.808	0.180	
6	5.217	5.175	12.446	12.331	5.281	5.233	12.952	12.920	5.235	5.234	12.948	12.916	1.802	0.180	
7	5.216	5.181	12.417	12.400	5.281	5.235	12.950	12.933	5.234	5.189	12.946	12.928	1.809	0.180	
8	5.199	5.159	12.367	12.309	5.256	5.207	12.886	12.870	5.239	5.235	12.882	12.866	1.802	0.180	
9	5.202	5.160	12.329	12.303	5.258	5.210	12.932	12.924	5.230	5.209	12.928	12.920	1.809	0.179	
10	5.231	5.186	12.394	12.331	5.283	5.235	12.932	12.924	5.239	5.223	12.928	12.920	1.804	0.181	
11	5.220	5.175	12.371	12.331	5.272	5.224	12.941	12.918	5.243	5.211	12.937	12.913	1.804	0.180	
12	5.206	5.157	12.375	12.289	5.252	5.205	12.900	12.881	5.251	5.223	12.972	12.877	1.804	0.180	
13	5.222	5.180	12.380	12.370	5.272	5.223	12.986	12.849	5.244	5.211	12.982	12.845	1.802	0.180	
14	5.228	5.186	12.424	12.363	5.276	5.228	12.859	12.894	5.243	5.234	12.854	12.890	1.807	0.180	
15	5.212	5.165	12.404	12.296	5.258	5.211	12.965	12.969	5.240	5.214	12.961	12.965	1.807	0.180	
16	5.222	5.181	12.391	12.403	5.279	5.230	12.912	12.894	5.163	5.281	12.908	12.890	1.807	0.180	
17	5.218	5.172	12.389	12.333	5.268	5.218	12.904	12.895	5.246	5.234	12.854	12.891	1.810	0.179	
18	5.226	5.180	12.455	12.350	5.271	5.224	12.965	12.968	5.238	5.226	12.961	12.963	1.810	0.180	
19	5.230	5.183	12.386	12.354	5.278	5.230	12.869	12.856	5.246	5.250	12.864	12.852	1.807	0.179	
20	5.237	5.193	12.482	12.378	5.284	5.236	12.926	13.028	5.239	5.225	12.972	12.936	1.796	0.180	
21	5.220	5.174	12.367	12.289	5.265	5.219	12.926	12.849	5.253	5.231	12.922	12.845	1.798	0.179	
22	5.232	5.185	12.417	12.373	5.280	5.232	12.926	12.849	5.240	5.210	12.922	12.845	1.800	0.179	
23	5.224	5.178	12.431	12.344	5.268	5.221	12.965	12.953	5.229	5.201	12.961	12.948	1.797	0.179	
24	5.220	5.178	12.390	12.398	5.281	5.235	12.950	12.933	5.225	5.249	12.922	12.903	1.810	0.178	
25	5.231	5.187	12.485	12.383	5.256	5.207	12.886	12.870	5.225	5.190	12.972	12.948	1.796	0.178	
26	5.224	5.179	12.457	12.335	5.258	5.210	12.932	12.924	5.226	5.203	12.924	12.918	1.796	0.178	
27	5.222	5.180	12.414	12.364	5.283	5.235	12.932	12.924	5.229	5.194	12.972	12.953	1.810	0.180	
28	5.231	5.188	12.434	12.448	5.272	5.224	12.941	12.918	5.218	5.171	13.022	12.948	1.790	0.178	
29	5.219	5.175	12.449	12.419	5.252	5.205	12.900	12.881	5.238	5.226	12.961	12.963	1.808	0.180	
30	5.200	5.158	12.401	12.310	5.272	5.223	12.986	12.849	5.246	5.250	12.864	12.852	1.808	0.180	
31	5.226	5.180	12.455	12.350	5.276	5.228	12.859	12.894	5.239	5.225	12.972	12.936	1.808	0.180	
32	5.230	5.183	12.386	12.354	5.268	5.218	12.904	12.895	5.253	5.231	12.922	12.845	1.810	0.180	
33	5.237	5.193	12.482	12.378	5.271	5.224	12.965	12.968	5.240	5.210	12.922	12.845	1.790	0.180	
34	5.220	5.174	12.367	12.289	5.278	5.230	12.869	12.856	5.225	5.249	12.922	12.903	1.808	0.180	
35	5.232	5.185	12.417	12.373	5.284	5.236	12.926	12.849	5.225	5.190	12.972	12.948	1.807	0.180	
36	5.224	5.178	12.431	12.344	5.265	5.219	12.926	12.849	5.226	5.203	12.924	12.918	1.808	0.180	
37	5.224	5.179	12.457	12.335	5.280	5.232	12.926	12.849	5.229	5.194	12.972	12.953	1.810	0.179	
38	5.222	5.180	12.414	12.364	5.268	5.221	12.965	12.953	5.218	5.171	13.022	12.948	1.810	0.180	
39	5.231	5.188	12.434	12.446	5.281	5.235	12.950	12.933	5.238	5.226	12.961	12.963	1.807	0.179	
40	5.219	5.175	12.449	12.419	5.266	5.207	12.886	12.870	5.246	5.250	12.864	12.852	1.808	0.180	
41	5.200	5.158	12.401	12.310	5.258	5.210	12.932	12.924	5.239	5.225	12.972	12.936	1.796	0.179	
42	5.226	5.180	12.455	12.350	5.283	5.235	12.932	12.924	5.225	5.181	12.944	12.936	1.808	0.180	
43	5.230	5.183	12.386	12.354	5.286	5.238	12.949	12.885	5.251	5.201	12.944	12.881	1.808	0.180	
44	5.237	5.193	12.482	12.378	5.266	5.216	12.896	12.885	5.230	5.181	12.892	12.881	1.812	0.180	
45	5.236	5.196	12.460	12.405	5.288	5.241	12.949	12.940	5.244	5.186	12.944	13.032	1.812	0.180	
46	5.250	5.202	12.527	12.463	5.294	5.247	12.859	12.975	5.238	5.224	12.854	12.971	1.797	0.180	
47	5.229	5.187	12.484	12.445	5.283	5.235	12.909	12.894	5.245	5.225	12.904	12.890	1.806	0.180	
48	5.237	5.194	12.527	12.434	5.287	5.240	12.896	12.940	5.248	5.178	12.892	12.936	1.794	0.180	
49	5.244	5.197	12.499	12.461	5.291	5.244	13.014	12.885	5.216	5.174	12.944	12.881	1.805	0.180	
50	5.246	5.200	12.481	12.466	5.295	5.248	12.981	12.978	5.236	5.180	12.977	12.973	1.797	0.180	
평균(Mean)		5.22	5.18	12.42	12.36	5.27	5.22	12.92	12.91	5.24	5.21	12.93	12.91	1.80	0.18
표준편차		0.01	0.01	0.05	0.05	0.01	0.01	0.04	0.04	0.01	0.03	0.04	0.04	0.01	0.00
범위(Range)		0.05	0.05	0.20	0.21	0.04	0.04	0.16	0.18	0.09	0.11	0.17	0.19	0.02	0.00
규격상한(USL)		5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	1.836	0.1836
규격하한(LSL)		5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	1.764	0.1764
UCL(Xbar+3σ)		5.26	5.21	12.56	12.52	5.31	5.26	13.03	13.03	5.28	5.29	13.06	13.04	1.802	0.18
UCL(Xbar+4σ)		5.18	5.14	12.28	12.20	5.24	5.19	12.81	12.78	5.19	5.14	12.80	12.78	1.79	0.18
UCL(Xbar+5σ)		6.89	7.38	4.38	3.97	7.45	7.39	5.72	5.00	6.27	3.51	4.92	4.81	1.94	1.99
UCL(Xbar+6σ)		9.04	10.89	4.97	4.88	8.37	9.63	1.89	1.80	7.92	4.75	1.57	1.68	1.70	2.26
UCL(Xbar+7σ)		4.75	3.86	3.80	3.06	6.53	5.14	9.55	8.21	4.62	2.27	8.27	7.94	2.18	1.71
PPK		4.75	3.86												

CHECK DATA SHEET

Date :	2011.11.05
Line :	A LINE
Name :	마영학
M/C No:	HATA 580
Model :	D46B2Q_CDY

A-StepNo	1	2	3	4	1	2	3	4	1	2	3	4
	A-Caption	A5V	B5V	B13V	Vamp	A5V	B5V	B13V	Vamp	A5V	B5V	B13V
A-Upper	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13
A-Lower	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88
A-Unit	V	V	V	V	V	V	V	V	V	V	V	V
S/NO	265V MIN				265V TYP				265V MAX			
1	5.203	5.255	12.334	12.314	5.279	5.228	12.890	12.800	5.238	5.189	12.918	12.918
2	5.224	5.290	12.355	12.309	5.289	5.242	12.905	12.888	5.234	5.188	12.900	12.883
3	5.218	5.279	12.342	12.319	5.284	5.233	12.830	12.820	5.252	5.194	12.825	12.816
4	5.229	5.259	12.362	12.330	5.289	5.236	12.862	12.851	5.234	5.205	12.858	12.847
5	5.210	5.276	12.321	12.299	5.274	5.224	12.892	12.880	5.238	5.198	12.888	12.876
6	5.231	5.175	12.447	12.361	5.285	5.254	12.890	12.878	5.234	5.239	12.885	12.873
7	5.233	5.276	12.440	12.378	5.285	5.254	12.887	12.874	5.233	5.194	12.883	12.869
8	5.214	5.254	12.346	12.283	5.259	5.228	12.832	12.819	5.238	5.240	12.828	12.814
9	5.214	5.255	12.394	12.279	5.260	5.229	12.874	12.865	5.229	5.214	12.869	12.861
10	5.241	5.290	12.419	12.338	5.284	5.255	12.922	12.919	5.238	5.228	12.918	12.914
11	5.235	5.279	12.360	12.351	5.271	5.241	12.865	12.859	5.242	5.216	12.860	12.854
12	5.215	5.259	12.344	12.345	5.255	5.225	12.892	12.838	5.250	5.228	12.848	12.833
13	5.239	5.276	12.410	12.323	5.276	5.244	12.910	12.896	5.243	5.216	12.905	12.892
14	5.242	5.278	12.449	12.351	5.277	5.249	12.821	12.809	5.242	5.239	12.817	12.804
15	5.217	5.263	12.360	12.348	5.262	5.231	12.890	12.880	5.239	5.219	12.885	12.876
16	5.240	5.273	12.411	12.403	5.280	5.248	12.852	12.846	5.162	5.286	12.848	12.842
17	5.229	5.272	12.405	12.323	5.268	5.239	12.857	12.846	5.245	5.239	12.853	12.842
18	5.237	5.276	12.399	12.346	5.276	5.246	12.917	12.901	5.237	5.231	12.913	12.897
19	5.238	5.282	12.410	12.400	5.280	5.250	12.821	12.809	5.245	5.255	12.817	12.804
20	5.251	5.289	12.485	12.389	5.287	5.256	12.852	12.943	5.238	5.230	12.848	12.938
21	5.223	5.260	12.365	12.276	5.267	5.238	12.785	12.774	5.252	5.236	12.780	12.769
22	5.245	5.285	12.386	12.340	5.282	5.252	12.819	12.804	5.239	5.215	12.814	12.799
23	5.237	5.272	12.441	12.373	5.274	5.241	12.890	12.881	5.228	5.206	12.885	12.877
24	5.233	5.276	12.381	12.335	5.269	5.241	12.864	12.850	5.224	5.254	12.859	12.846
25	5.241	5.282	12.434	12.376	5.281	5.252	12.869	12.881	5.224	5.195	12.864	12.877
26	5.232	5.277	12.425	12.368	5.270	5.241	12.869	12.851	5.225	5.208	12.864	12.847
27	5.241	5.276	12.447	12.366	5.277	5.246	12.895	12.876	5.228	5.199	12.890	12.872
28	5.248	5.289	12.436	12.375	5.284	5.253	12.940	12.925	5.217	5.176	12.935	12.921
29	5.231	5.273	12.409	12.395	5.268	5.237	12.946	12.925	5.243	5.220	12.942	12.921
30	5.238	5.282	12.410	12.400	5.282	5.221	12.807	12.800	5.252	5.216	12.803	12.796
31	5.251	5.289	12.485	12.389	5.274	5.241	12.890	12.881	5.250	5.228	12.848	12.833
32	5.223	5.260	12.365	12.276	5.269	5.241	12.864	12.850	5.243	5.216	12.905	12.892
33	5.245	5.285	12.386	12.340	5.281	5.252	12.869	12.881	5.242	5.239	12.817	12.804
34	5.237	5.272	12.441	12.373	5.270	5.241	12.869	12.851	5.239	5.219	12.885	12.876
35	5.241	5.282	12.434	12.376	5.277	5.246	12.895	12.876	5.162	5.286	12.848	12.842
36	5.232	5.277	12.425	12.368	5.259	5.228	12.832	12.819	5.245	5.239	12.853	12.842
37	5.241	5.276	12.447	12.366	5.260	5.229	12.874	12.865	5.224	5.195	12.864	12.877
38	5.248	5.289	12.436	12.375	5.284	5.255	12.922	12.919	5.225	5.208	12.864	12.847
39	5.231	5.273	12.409	12.395	5.271	5.241	12.865	12.859	5.228	5.199	12.890	12.872
40	5.238	5.282	12.410	12.400	5.255	5.225	12.852	12.838	5.217	5.176	12.935	12.921
41	5.251	5.289	12.485	12.389	5.276	5.244	12.910	12.896	5.243	5.220	12.942	12.921
42	5.223	5.260	12.365	12.276	5.277	5.249	12.821	12.809	5.252	5.216	12.803	12.796
43	5.235	5.270	12.461	12.433	5.289	5.259	12.889	12.800	5.250	5.228	12.848	12.833
44	5.232	5.268	12.421	12.346	5.268	5.236	12.831	12.833	5.229	5.186	12.827	12.828
45	5.244	5.285	12.481	12.439	5.291	5.261	12.964	12.958	5.243	5.191	12.959	12.953
46	5.259	5.298	12.459	12.434	5.297	5.266	12.927	12.929	5.237	5.229	12.923	12.924
47	5.240	5.286	12.441	12.445	5.286	5.255	12.946	12.929	5.244	5.230	12.942	12.924
48	5.248	5.288	12.480	12.463	5.290	5.258	12.895	12.929	5.247	5.183	12.817	12.833
49	5.259	5.301	12.454	12.395	5.293	5.263	12.939	12.938	5.215	5.179	12.934	12.933
50	5.259	5.302	12.447	12.454	5.299	5.268	12.960	12.940	5.235	5.185	12.955	12.936
평균(Mean)	5.24	5.28	12.41	12.36	5.28	5.24	12.88	12.87	5.23	5.22	12.87	12.87
표준편차	0.01	0.02	0.04	0.05	0.01	0.01	0.04	0.05	0.02	0.02	0.04	0.05
범위(Range)	0.06	0.13	0.16	0.19	0.05	0.05	0.18	0.18	0.09	0.11	0.18	0.18
규격상한(USL)	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13	5.57	5.57	13.13	13.13
규격하한(LSL)	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88	5.04	5.04	11.88	11.88
UCL(Xbar+3σ)	5.27	5.33	12.54	12.50	5.31	5.28	13.00	13.00	5.29	5.29	13.01	13.00
UCL(Xbar+4σ)	5.20	5.22	12.28	12.22	5.24	5.21	12.75	12.73	5.18	5.14	12.74	12.73
UCL(Xbar+5σ)	6.91	4.76	4.79	4.44	7.81	7.51	5.05	4.59	4.97	3.53	4.64	4.63
UCL(Xbar+6σ)	8.73	5.29	5.49	5.45	8.66	9.25	2.03	1.93	6.30	4.72	1.90	1.96
UCL(Xbar+7σ)	5.09	4.22	4.08	3.42	6.96	5.77	8.06	7.25	3.64	2.35	7.37	7.30
PPK	5.09	4.22	4.08	3.42	6.96	5.77	2.03	1.93	3.64	2.35	1.90	1.96