ECCO Electronics Technology Co.,ltd

25W DC-DC converter

Typical Performance

⊙Wide Input voltage range (2:1/4:1)	
⊙Typical Efficiency:80%	
⊙Switching frequency：300KHz	
⊙Output Short Circuit Protection,Self-furbish,Over Current Protection	
⊙Input-output isolate 1500VDC	
⊙PCB Board in-line type installs	
⊙Metal Case	

Technology parameter Test condition:General Nominal Line,Tc=25℃，Rated resistant load unless other wisespecified

Input Feature	Min	Nom	Max	Notes
Input voltage(Vdc)	9(start violtage 9.5V)	12	18	W 2:1
	18	24	36	W 2:1
	36	48	72	W 2:1
	72	110	144	W 2:1
	9(start violtage 9.5V)	18	36	W 4:1
	18	36	72	W 4:1
REMOTE(ON/OFF)	ON		Open Circuit or High level(8~+Vin)	
	OFF		Connect to FG or Low level(0~0.4V)	

Output Feature

Voltage accuracy		Vo1;Vo2,Vo3	±1.0%, ±3.0%
Line regulation	Nominal Load,full voltage input range	Vo1;Vo2,Vo3	±0.2%, ±1.5%
Load regulation	Nominal Input Voltage,20% ~ 100% Nominal Load	Vo1;Vo2,Vo3	±0.5%, ±3.0%
Ripple and noise	20MHz BM full load Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p;test by 20M oscillograph		
Voltage adjust	Standard output voltage	TRIM	±10%(adjustable)
Peak Deviation	25% Rated Load Vary	ΔVo1/ Vo1	≤±5.0%
Dynamic Response Setting Time			≤200us

General Feature

Efficiency			80% typical
Switching Frequency			300KHz
Operating temperature	Free air	Industrial level	-25℃ ~ +55℃
Storage temperature			-40℃ ~ +105℃
Max case temperature			+90℃
Relative humidity			10%~90%
case material			Metal case
Isolation Voltage	Input-Output		1000VDC
	Input-Case		500VDC
	Output-Case		500VDC
Isolation Resistance			10MΩ
Temperature Coefficient			≤±0.02%/℃
Cooling			Natural Convection
MTBF	BELLCORE TR332，（25℃）		$2X10^5$Hrs

NOTE:

(1)The module working environment temperature more than 55 ℃ need derating use (- 0.15W/℃), but the max shell temperature shall not be more than 90 ℃.

(2)Capacitive load:

The output of the module can be applied electrolytic capacitor, but too much capacity and low ESR may cause the module instability, or cause current limiting point become low,we recommend 100 u F/A of the output capacitance , the current is rated output current.

Product Nomination Method

example	L D 25 – 48 S 05 I ① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide input voltage：2：1	⑥	output voltage
②	Power adaptation mode：D（DC-DC）	⑦	I:Dual Route output Isolate
③	Output power(W)		W:Super Wide input voltage
④	Normal input voltage		
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output		

Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
LD25-12S3V3	12 V（9~18V）	3.3V	5000mA				

LD25-12S05		5V	5000mA				
LD25-12S09		9V	2770mA				
LD25-12S12		12V	2080mA				
LD25-12S15		15V	1660mA				
LD25-12S24		24V	1040mA				
LD25-12D05		+5V	2500 mA	-5V	2500 mA		
LD25-12D09		+9V	1390 mA	-9V	1390 mA		
LD25-12D12		+12V	1040 mA	-12V	1040 mA		
LD25-12D15		+15V	830 mA	-15V	830 mA		
LD25-12D24		+24V	520 mA	-24V	520 mA		
LD25-12T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-12T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA
LD25-18S3V3	18V（9~36V）	3.3V	5000mA				
LD25-18S05		5V	5000mA				
LD25-18S09		9V	2770mA				
LD25-18S12		12V	2080mA				
LD25-18S15		15V	1660mA				
LD25-18S24		24V	1040mA				
LD25-18D05		+5V	2500 mA	-5V	2500 mA		
LD25-18D09		+9V	1390 mA	-9V	1390 mA		
LD25-18D12		+12V	1040 mA	-12V	1040 mA		
LD25-18D15		+15V	830 mA	-15V	830 mA		
LD25-18D24		+24V	520 mA	-24V	520 mA		
LD25-18T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-18T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA
LD25-24S3V3	24V（18~36V）	3.3V	5000mA				
LD25-24S05		5V	5000mA				
LD25-24S09		9V	2770mA				
LD25-24S12		12V	2080mA				
LD25-24S15		15V	1660mA				
LD25-24S24		24V	1040mA				
LD25-24D05		+5V	2500 mA	-5V	2500 mA		
LD25-24D09		+9V	1390 mA	-9V	1390 mA		

LD25-24D12		+12V	1040 mA	-12V	1040 mA		
LD25-24D15		+15V	830 mA	-15V	830 mA		
LD25-24D24		+24V	520 mA	-24V	520 mA		
LD25-24T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-24T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA
LD25-36S3V3	36V（18~72V）	3.3V	5000mA				
LD25-36S05		5V	5000mA				
LD25-36S09		9V	2770mA				
LD25-36S12		12V	2080mA				
LD25-36S15		15V	1660mA				
LD25-36S24		24V	1040mA				
LD25-36D05		+5V	2500 mA	-5V	2500 mA		
LD25-36D09		+9V	1390 mA	-9V	1390 mA		
LD25-36D12		+12V	1040 mA	-12V	1040 mA		
LD25-36D15		+15V	830 mA	-15V	830 mA		
LD25-36D24		+24V	520 mA	-24V	520 mA		
LD25-36T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-36T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA
LD25-48S3V3	48V（36~72V）	3.3V	5000mA				
LD25-48S05		5V	5000mA				
LD25-48S09		9V	2770mA				
LD25-48S12		12V	2080mA				
LD25-48S15		15V	1660mA				
LD25-48S24		24V	1040mA				
LD25-48D05		+5V	2500 mA	-5V	2500 mA		
LD25-48D09		+9V	1390 mA	-9V	1390 mA		
LD25-48D12		+12V	1040 mA	-12V	1040 mA		
LD25-48D15		+15V	830 mA	-15V	830 mA		
LD25-48D24		+24V	520 mA	-24V	520 mA		
LD25-48T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-48T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA
LD25-110S3V3	110V（72~144V）	3.3V	5000mA				
LD25-110S05		5V	5000mA				

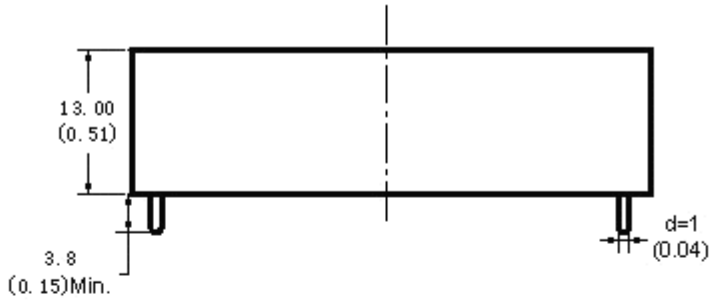
LD25-110S09		9V	2770mA				
LD25-110S12		12V	2080mA				
LD25-110S15		15V	1660mA				
LD25-110S24		24V	1040mA				
LD25-110D05		+5V	2500 mA	-5V	2500 mA		
LD25-110D09		+9V	1390 mA	-9V	1390 mA		
LD25-110D12		+12V	1040 mA	-12V	1040 mA		
LD25-110D15		+15V	830 mA	-15V	830 mA		
LD25-110D24		+24V	520 mA	-24V	520 mA		
LD25-110T5-12		+5V	3500 mA	+12V	250 mA	-12V	250 mA
LD25-110T5-15		+5V	3500 mA	+15V	200 mA	-15V	200 mA

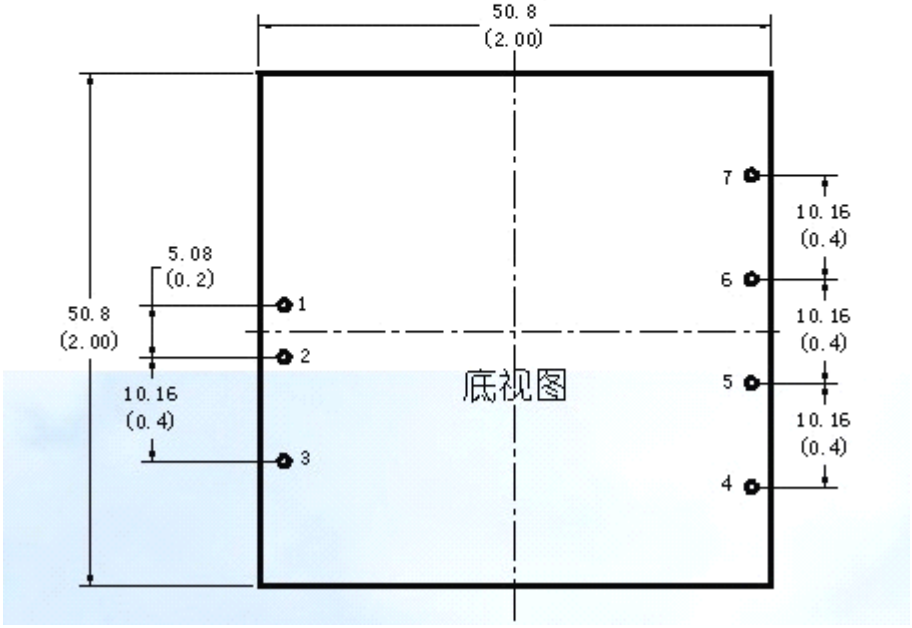
*NOTE:

(1)This series, if the nominal input is 12V,the module does not support long time short circuit protection, short time should be controlled within 20 S.

(2)The output ripple noise (peak value) measurement, please reference module test instructions.

Mechanical Dimension

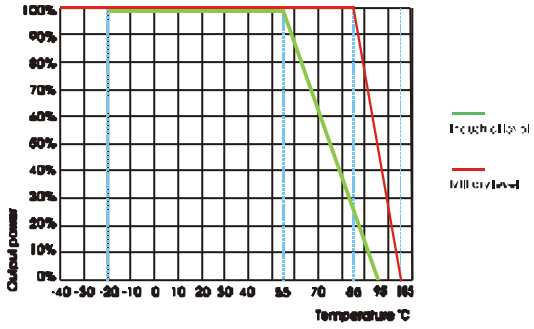




BOTTON VIEW

UNIT:mm(inch)

Temperature Curve



Mechanical Data

Packing	L x W x H	Packing No.
25W	50.80 x 50.80 x 12.70mm(2*2*0.5inch)	

Pin Assignment

PIN	1	2	3	4	5	6	7			
S	+Vin	-Vin	REM	TRIM	GND	Vo1	NP			
D	+Vin	-Vin	REM	TRIM	-V02	COM	-Vo1			
T	+Vin	-Vin	REM	Vo3	COM	+Vo1	-Vo2			

*Note：The power modules such as the definition of the pin does not match with the hand book,please refer to the actual item.