

承认书

SPECIFICATIONS FOR APPROVAL

客戶名稱

CUSTOMER: _____

產品名稱

DESCRIPTION: _____

CPU COOLER

客戶產品編號

CUSTOMER P/N: _____

NTK產品編號

NTK PART NUMBER: _____

20% %&\$) 01

承認書編號

APPROVAL SHEET NO. : _____

201, %&\$) 01

版本

VERSION: _____

REV0

發出日期

ISSUED DATE: _____

201, /%&/\$)

樣品數量

SAMPLES Q' TY: _____

Pcs/Kit

確認事由



NEW PRODUCT



DESIGN CHANGE

SAMPLE STATUS



RE- SOURCING



OTHER

客戶確認

CUSTOMER APPROVED

核準

APPROVED

審核

CHECKED

經辦

PREPARED

WEN

WEN

Ruochen. Liao



ISO 9001:2008



ISO 14001:2004



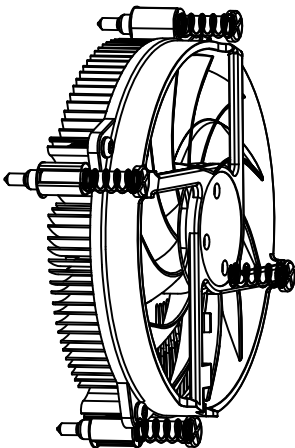
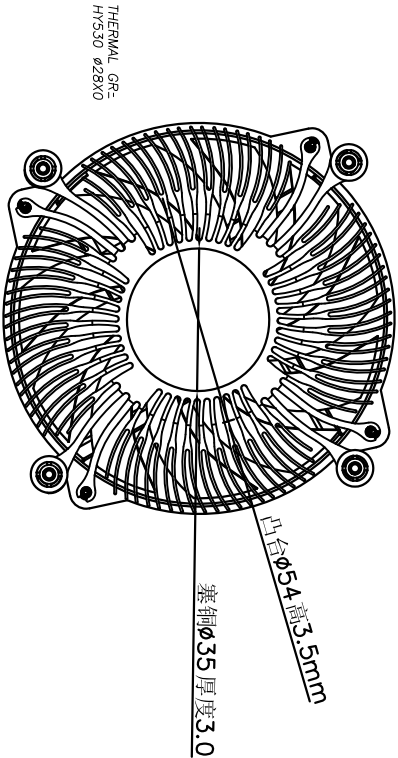
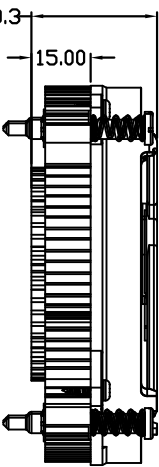
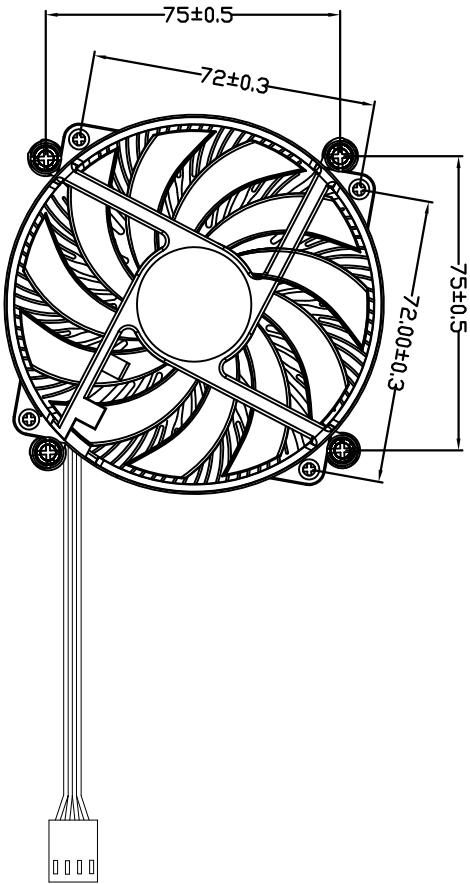
OHS 18001



IECQ QC 080000



RoHS



2018.12.05

Ruochen.Liao

NEW DRAWING

EC-DXXXX

N/A

0

DATE

DR. BY

RECORD

EC. NO.

MARKS

REV.

DIMENSIONS IN mm

MATERIALS

TREATMENT

N/A

FINISH

TOLERANCE UNLESS OTHERWISE SPECIFIED

0 PLC. DEC. ± 0.50

1 PLC. DEC. ± 0.30

2 PLC. DEC. ± 0.15

3 PLC. DEC. ± 0.15

ANGLES: ±

SURFACE TEXTURE:

REMOVE BURRS, BREAK SHARP EDGES.

DD NOT SCALE DRAWING

DRAW

Ruochen.Liao

DATE

DATE

DATE

DATE

DATE

DATE

CHECK

Wen

DATE

DATE

DATE

DATE

DATE

DATE

APPR.

Wen

DATE

DATE

DATE

DATE

DATE

DATE

SCALE

CD

DWG ID

DRAWING NO.

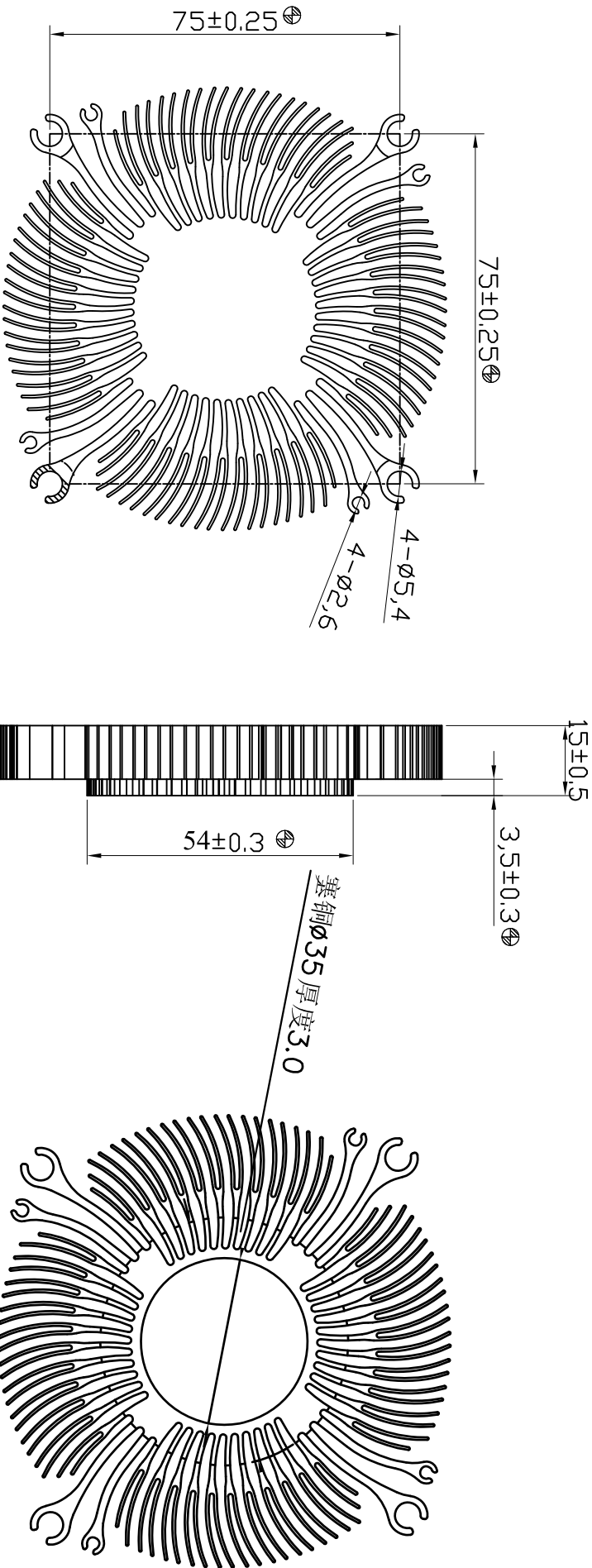
H010010017

REV.

0

SHEET

1 OF 2



技术要求

- 1, 表面处理: 洗白。
- 2, 散热片不能有毛刺, 污渍, 变形, 划伤等外观不良。
- 3, 保证品质, 请妥善包装。
4. 底部圆型凸台, 直径54MM

2018.12.05		Ruochen.Liao		NEW DRAWING		EC-DXXXX		N/A		0	
DATE		DR. BY		RECORD		EC. NO.		MARKS		REV.	
DIMENSIONS IN mm				MATERIALS		TREATMENT		FINISH			
TOLERANCE UNLESS OTHERWISE SPECIFIED											
0 PLC. DEC. \pm 0.50				DRAW		DATE					
1 PLC. DEC. \pm 0.30				Ruochen.Liao		2015.01.21					
2 PLC. DEC. \pm 0.15				CHECK		DATE					
3 PLC. DEC. \pm				Wen		2015.01.21					
ANGLES: \pm				APPR.		DATE					
SURFACE TEXTURE:				Wen		2015.01.21		sunflower \varnothing 95x15mm AL6063 洗白			
REMOVE BURRS, BREAK SHARP EDGES.											
DO NOT SCALE DRAWING				SCALE		DWG ID		DRAWING NO.		REV.	
				CD						0	
										1 OF 1	



4、成品符合RQHS标准;

4、成品符合ROHS标准;



材料厚度为0.2

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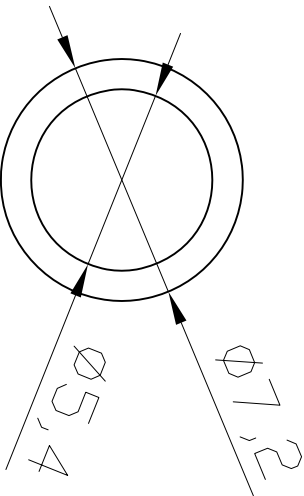
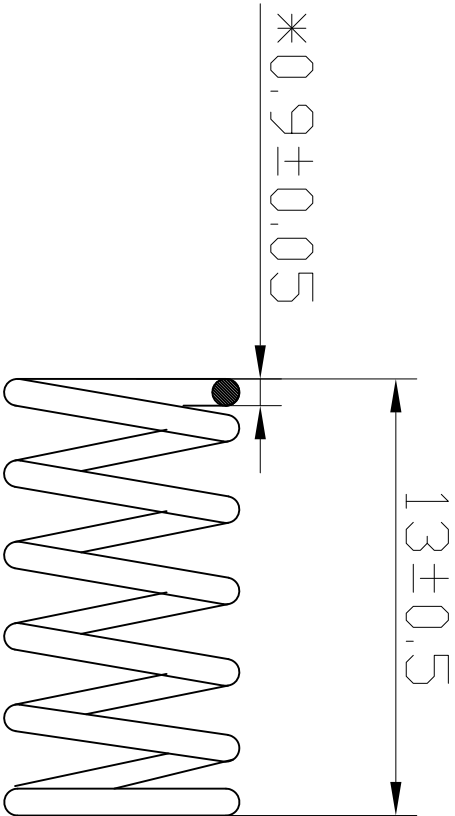
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CRITICAL
DIMENSION


THIRD ANGLE
PROJECTION


THIRD ANGLE
PROJECTION



2018.12.05	Ruochen.Liao	NEW DRAWING	EC-DXXXX	N/A	0
DATE	DR. BY	RECORD	EC. NO.	MARKS	REV.
DIMENSIONS IN: mm		MATERIALS		TREATMENT	
TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAW		DATE	
0 P.L.C. DEC: ± 0.50		Ruochen.Liao		2014.09.10	
1 P.L.C. DEC: ± 0.30		CHECK		DATE	
2 P.L.C. DEC: ± 0.15		Wen		2014.09.10	
3 P.L.C. DEC: ± 0.15		APPR.		DATE	
ANGLES: ±		Wen		2014.09.10	
SURFACE TEXTURE:		SCALE		DRAWING NO.	
REMOVE BURRS, BREAK SHARP EDGES.		Wen		Spring Ø0.9xØ7.2x13mm SMC 镀亮镍	
DO NOT SCALE DRAWING		DWG ID		REV.	
		CD		0	
		H040060005		SHEET	
				1 OF 1	

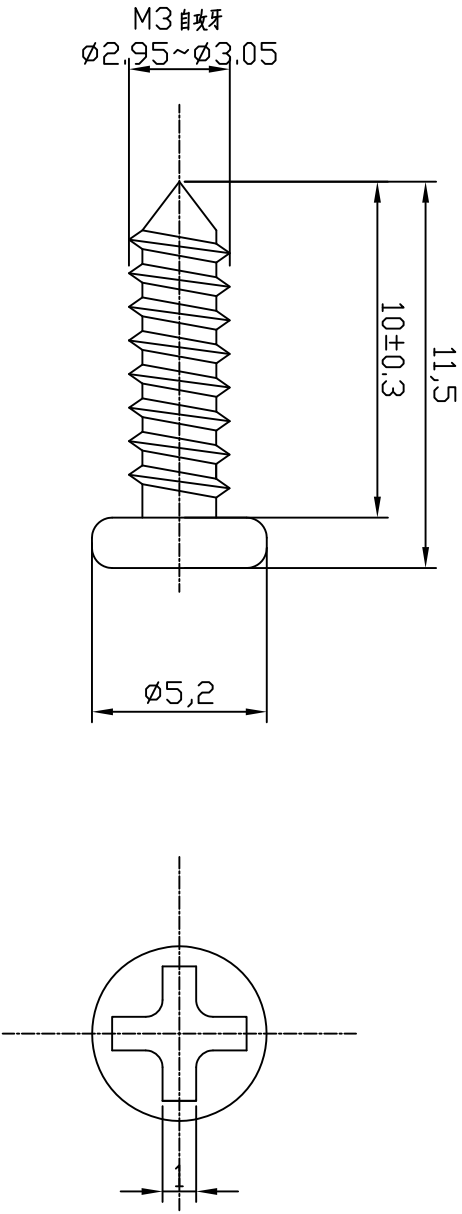
技术要求

- 1、材质：琴钢线，弹簧左旋，圈数：5Nj，表面处理：电镀环保亮镍；
- 2、外观不可以有锈迹、脏污、变形、生锈与电镀不良；
- 3、盐雾测试≥8h；
- 4、成品符合ROHS 标准；


CRITICAL
DIMENSION


THIRD ANGLE
PROJECTION


THIRD ANGLE
PROJECTION



技术要求

1. 材质: C1018; 表面处理: 电镀环保亮镍;
- 2、外观不可以有铁渣、脏污、变形、生锈与电镀不良;
- 3、盐雾测试≥8h;
- 4、成品符合ROHS 标准;

2018.12.05	Ruochen.Liao	NEW DRAWING	EC-DXXXX	N/A	0
DATE	DR. BY	RECORD	EC. NO.	MARKS	REV.
DIMENSIONS IN: mm	MATERIALS	TREATMENT	FINISH		
TOLERANCE UNLESS OTHERWISE SPECIFIED		DATE	DATE		
0 P.L.C. DEC: ± 0.50		DRAW	2015.01.21		
1 P.L.C. DEC: ± 0.30		Ruochen.Liao	DATE		
2 P.L.C. DEC: ± 0.15		CHECK	2015.01.21		
3 P.L.C. DEC: ± 0.15		Wen	DATE		
ANGLES: ±		APPR.	DATE		
SURFACE TEXTURE:		Wen	2015.01.21		
REMOVE BURRS, BREAK SHARP EDGES.		SCALE	DWG ID	DRAWING NO.	
DO NOT SCALE DRAWING		Wen	CD	H040050004	REV. 0
		SCREW M3x10LxØ5.2自攻牙, C1018, 镀亮镍,		REV. 0	SHEET 1 OF 1

产品规格书
(PRODUCT SPECIFICATION)

A. 一般规格 (General Specification)

项目 (Item)		规格/条件 (Specification/Condition)	
01	型号 (Part No.)	CD9215M12FA	
02	外型尺寸 (Outline Dimension)	95mm*95mm*16.8mm	
03	额定电压 (Rated Voltage)	DC 12V	
04	启动电压 (Starting Voltage)	7.0V ON/OFF	a. 额定电压 (Rated Voltage) b. 25℃ 65% RH c. After testing for 5 minutes
05	额定电流 (Rated Current)	0.20A MAX	
06	消耗功率 (Power Consumption)	2.4 W MAX	
07	转速 (Speed)	0%=800RPM±300 100%=2800RPM±10%	a. 25℃ 65% RH b. 自由空气 (Free Air) c. 额定电压 (Rated Voltage) d. After testing for 5 minutes
08	最大风量 (Max. Airflow)	36.28 CFM	a. 额定电压 (Rated Voltage) b. AMCA标准 (Standard) c. 额定电流 (Rated Current)
09	最大静压 (Max. Static Pressure)	1.7 mm-H2O	
10	音量标准 (Noise Level)	37.6 dB(A)	a. 额定电压 (Rated Voltage) b. 无音室测试 (Measured in a Non-Echo Chamber) c. CNS 8753标准 (Standard) d. ISO 3744测试条件 (Test Condition)
11	寿命 (Life)	25000 Hrs 40℃	MTTF (Mean Time to Failure) Conf. Level 90%
12	扇叶数 (No. of Blade)	11片叶	
13	极数 (No. of Pole)	4极	
14	旋转方向 (Rotating Direction)	目视扇框底标签面顺时针转	

B. 主要材料/零件规格 (Main Materials/Parts Specification)

材料/零件 (Materials/Parts)		规格 (Specification)
01	塑胶材料/扇叶、外框	PBT黑色圆框_PBT白色11葉
02	轴承 (Bearing)	液压轴承 (LONG LIFE BEARING)
03	导线 (Lead Wire)	UL1061 28AWG (-) 黑色 (+) 红色 (FG) 黄色 (PWM) 蓝色 并线框外 310mm 2510-4P

产品规格书

(PRODUCT SPECIFICATION)

C. 电器规格 (Electrical Specification)

项目 (Item)		规格/条件 (Specification/Condition)
1	扇叶锁住保护 (Locked Rotor Protection)	常温 (25℃) 额定电压锁住72小时后可正常运转
2	绝缘阻抗 (Insulation Resistance)	10MΩ / 裸线与外框测量500VDC/min
3	绝缘耐压 (Dielectric Strength)	5MA MAX/导线与外框测量500VDC/min

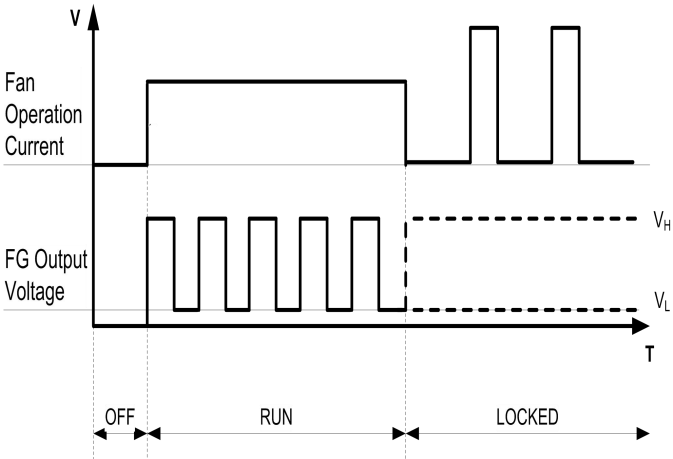
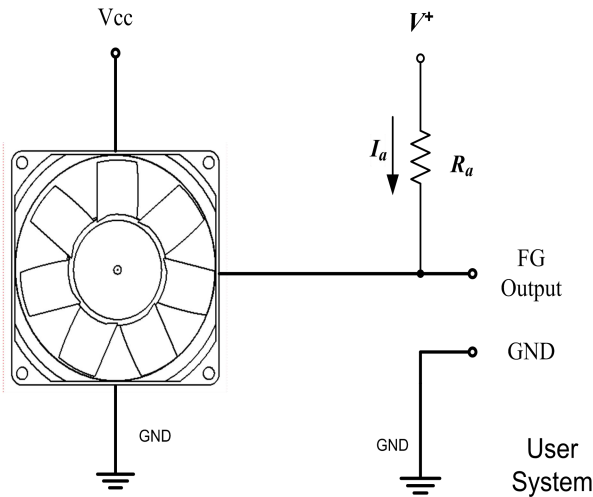
D. 环境测试 (Environmental Specification)

项目 (Item)		规格/条件 (Specification/Condition)
01	运转温/湿度范围 (OperatingTemp. Range)	温度: -10℃~70℃ 湿度: 35%-85%RH
02	保存温度范围 (Storage Temperature)	温度: -10℃~70℃ 湿度: 35%-85%RH
03	耐湿性 (Humidity)	实验后, 电气规格依据MIL-STD 202F Method 103B 寿命: 96小时 湿度: 95%RH 温度: 40±2℃
04	热冲击 (Tuermal Shock)	试验后, 电气规格依据MIL-STD 202F Method 107D
05	绝缘阶段 (Insulation Shock)	UL A种
06	包装耐振动试验 (Packing Vibration Test)	包装后, XYZ三方向施1.1G加速度, 振动30分钟后无异状
07	包装耐冲击试验 (Packing Shock Proof Test)	捆包状态下, 高60CM, 1棱角3边6角自然落下, 无异状
08	所有的材料都为环保材料	

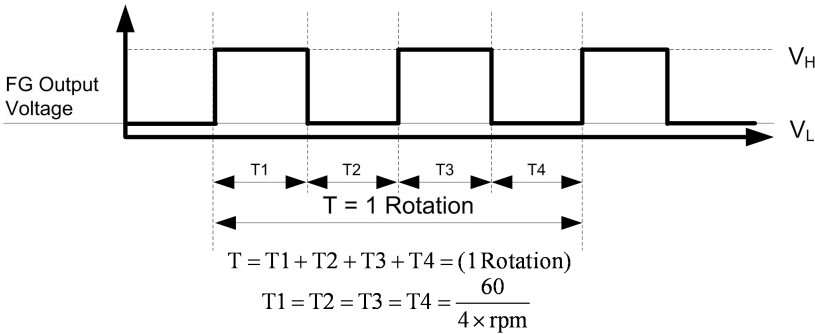
产品规格书

(PRODUCT SPECIFICATION)

E. 信号规范 (SENSOR SPECIFICATION)



- ★ R_a : Pull up Resistor
- ★ $R_a \geq V^+ / I_a(\max)$



Parameter	Ratings			Unit
	Min	Type	Max	
FG Supply Voltage (V^+)	-	-	13.2	V
FG Output Current (I_a)	-	-	5	mA
FG Output (V_L)	-	0.3	0.5	V
FG Output (V_H)	2.8★ ¹	-	-	V

“★” 1 : $V_{cc} \geq 3.3v$

产品规格书
(PRODUCT SPECIFICATION)

E. SPEC. Drawing

