

承 认 书

Acknowledgement Sheet

Customer name： 深圳市精睿兴业科技有限公司

Customer P/N:

Product name：TYPE-C母座

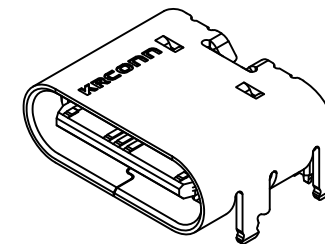
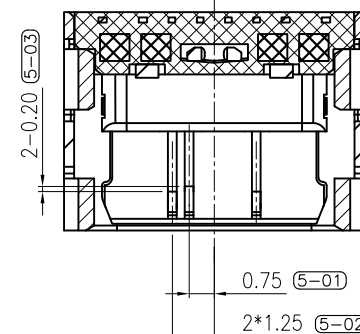
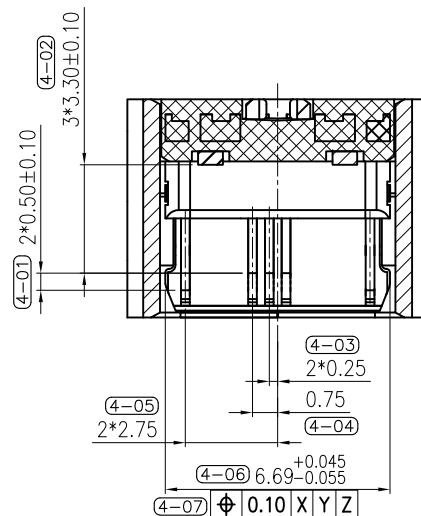
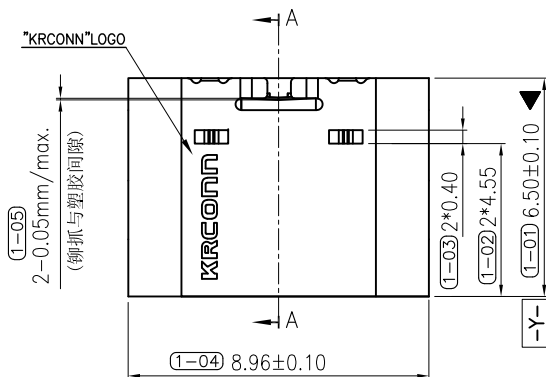
Product description: Type.C 8pin Rec 总长6.5跑道口DIP型 镀金15唛

KRCONN Part Number：TCR60-32120805-D5

Customer Acknowledgement 客户承认栏	KRCONN Acknowledgement 精睿承认栏
Signature/Date：	Signature/Date：朱金斗
Checked/Date：	Checked/Date：陈少兵
Approved/Date：	Approved/Date：马秋雷

承认结果	☐ 接受 ☐ 有条件接受 ☐ 承认不通过
批示意见:	

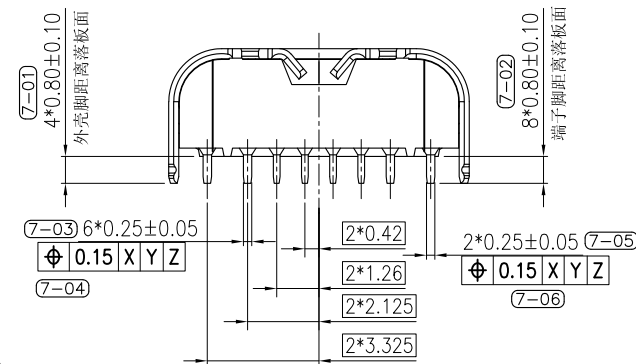
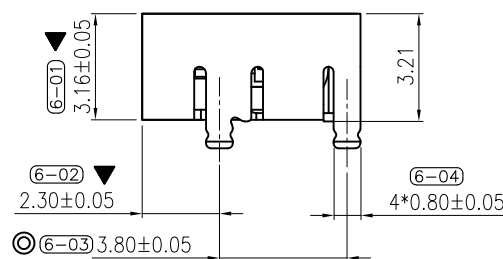
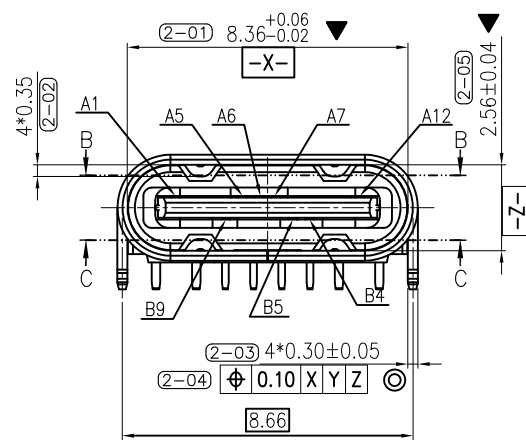
REV.	ECN NO OR DESCRIPTION	REVISED	DATE
A	FIRST RELEASE	ERIC	2026.04.15



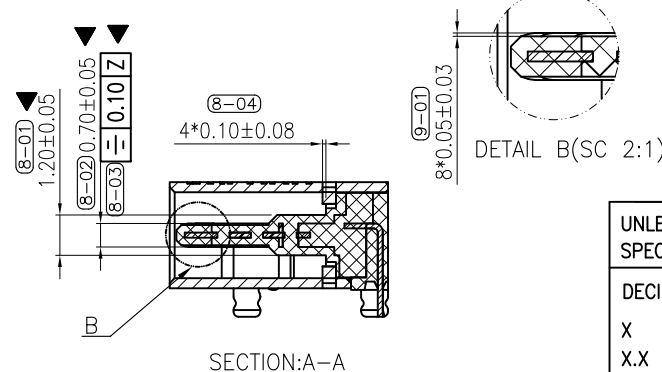
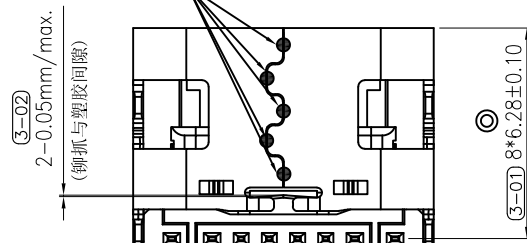
3d view
Front

品质管控等级要求

符号	等级	产品管控要求
▼	重点要求	巡检, 定义检验频率
▽	特殊性要求	CPK>1.33
◎	全检要求	自动机检验



Laser Welding



UNLESS OTHERWISE
SPECIFIED TOLERANCES

DECIMALS:	ANGLES:
X :±0.5	X :±2°
X.X :±0.30	X.X :±1°
X.XX :±0.20	
X.XXX :±0.10	



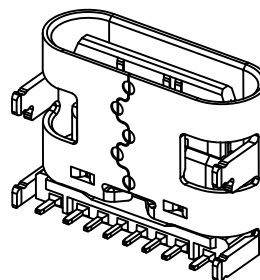
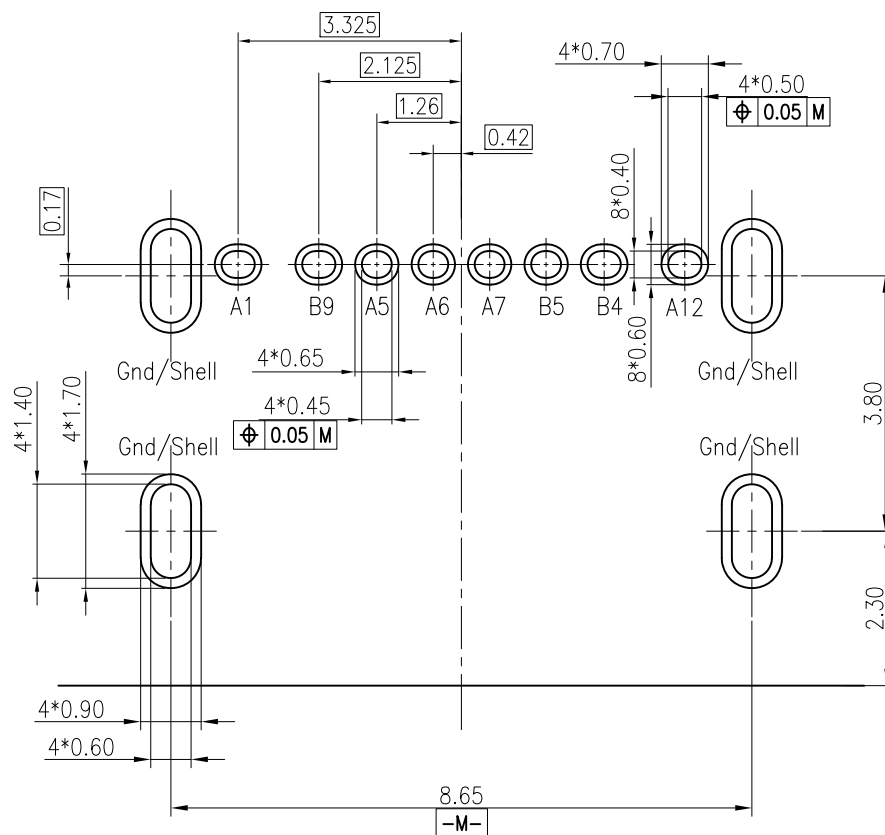
深圳市精睿兴业科技有限公司
SHENZHEN KRCONN TECHNOLOGY CO., LTD

TITLE	Type.C 8PIN L=6.5MM CONN. RECPTACLE			
DWN	chenjun	PART NO. TCR60-32120805-D5		
CHKD	chenjun	SCALE:1:1	UNIT: mm	◎
APVD	Kevin.d	SIZE: A4	SHEET: 10F3	REV: A
DRAW NO. C-DWG-TCR60-D5		CUSTOMER COPY		



PIN ASSIGNMENTS:

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
GND				CC1	D+	D-					GND
B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1
			VBUS				CC2	VBUS			

3d view
BackRECOMMENDED P.C.B LAYOUT (COMPONENT SIDE)
DEFAULT TOLERANCE: $\pm 0.05\text{mm}$

SPECIFICATION:

1.ELECTRICAL CHARACTERISTICS:

- 1.1 CURRENT RATING: 3A/ TOTAL POWER PIN
1.25A/ Pin MAX(A1,A12,B1,B12),0.25A(OTHER PIN)
- 1.2 CONTACT RESISTANCE: 40 MILLIONHM MAX.
- 1.3 DIELECTRIC WITHSTANDING VOLTAGE: 100 VAC r.m.s
- 1.4 INSULATION RESISTNACE: 100 MEGOHMS MIN.

2.MECHANICAL CHARACTERISTICS

- 2.1 INSERTION FORCE: 5~20N
- 2.2 EXTRACTION FORCE: Initial:8~20N;Durability:5~20N(10000cycles);
- 2.3 DURABILITY:10000 CYCLES

3.ENVIRONMENTAL CHARACTERISTICS

- 3.1 TEMPERATURE RANGE: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- 3.2. IR REFLOW:

THE PEAK TEMPERATURE ON THE BOARD SHALL
BE MAINTAINED FOR 10 SECONDS AT 260°C .

TCR60 - 32 1 2 08 05 - D5

PRODUCT ORDER

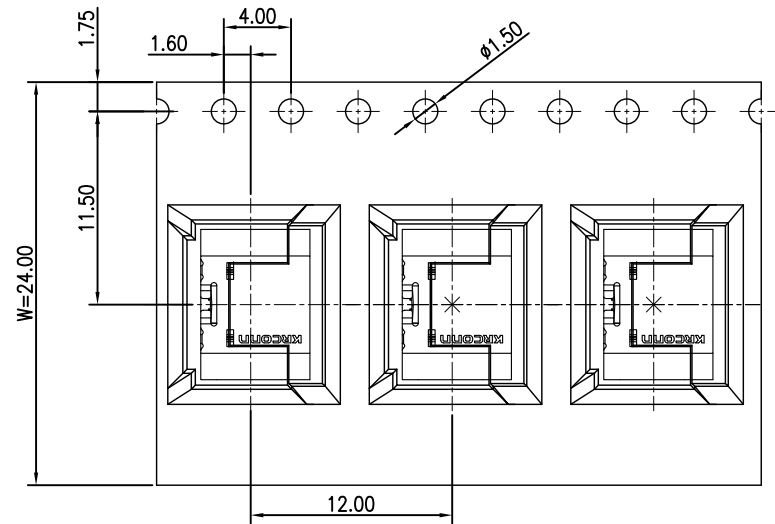
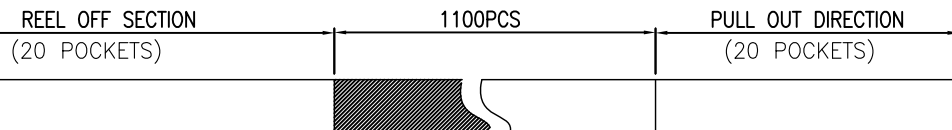
HEIGHT ON BOARD 32=3.2mm
COLOUR/1=BLACK HOUSING
POST/2=Without Dull Post
Pin Number./08=8Pin
Plating On Contact Area./05=Au15u"
Services Number.

④	MID PLATE	1 PCS	STAINLESS STEEL	NO SURFACE TREATMENT
③	CONTACT	1 SET	COPPER OLLAY	Ni 50u"min. UNDER PLATED OVER ALL. CONTACT AREA:15u"Au BRUSH PLATING SOLDER AREA:1u"Au"
②	HOUSING	1 PCS	THERMOPLASTIC	COLOR: BLACK
①	SHELL	1 PCS	STAINLESS STEEL	Ni 30u" MIN. UNDER PLATED OVER ALL.
NO.	DESCRIPTION	QTY.	MATERIAL	FINISH
UNLESS OTHERWISE SPECIFED TOLERANCES			深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO., LTD	
DECIMALS:		ANGLES:	TITLE Type.C 8PIN L=6.5MM CONN. RECPTACLE	
X	: ± 0.5	X	: $\pm 2^{\circ}$	DWN chenjun PART NO. TCR60-32120805-D5
X.X	: ± 0.30	X.X	: $\pm 1^{\circ}$	CHKD chenjun SCALE:1:1 UNIT: mm
X.XX	: ± 0.20			APVD Kevin.d SIZE: A4 SHEET: 20F3
X.XXX	: ± 0.10			REV: A
DRAW NO. C-DWG-TCR60-D5			CUSTOMER COPY	

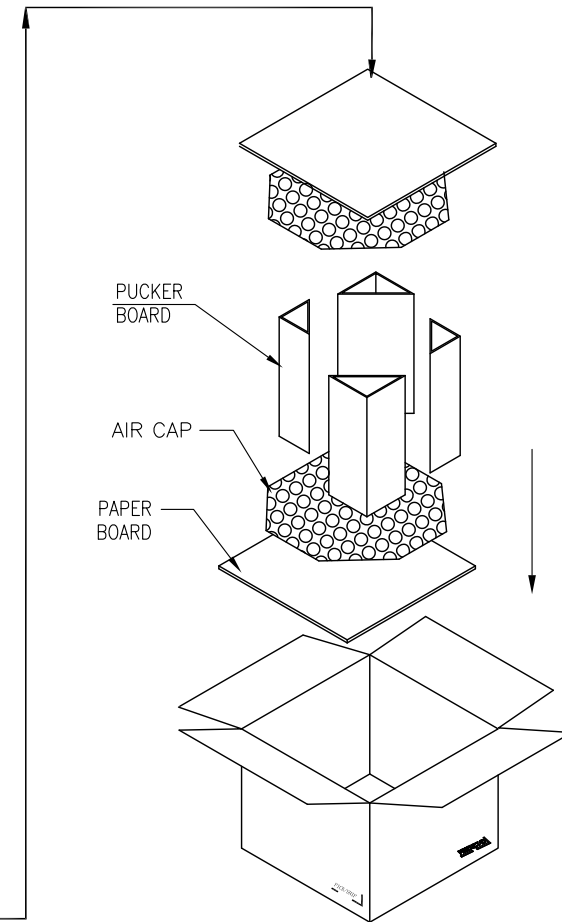
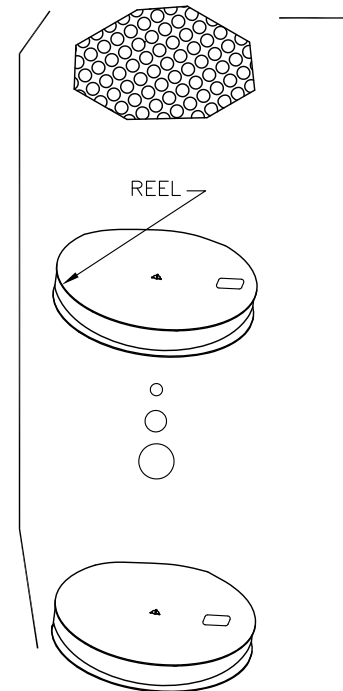
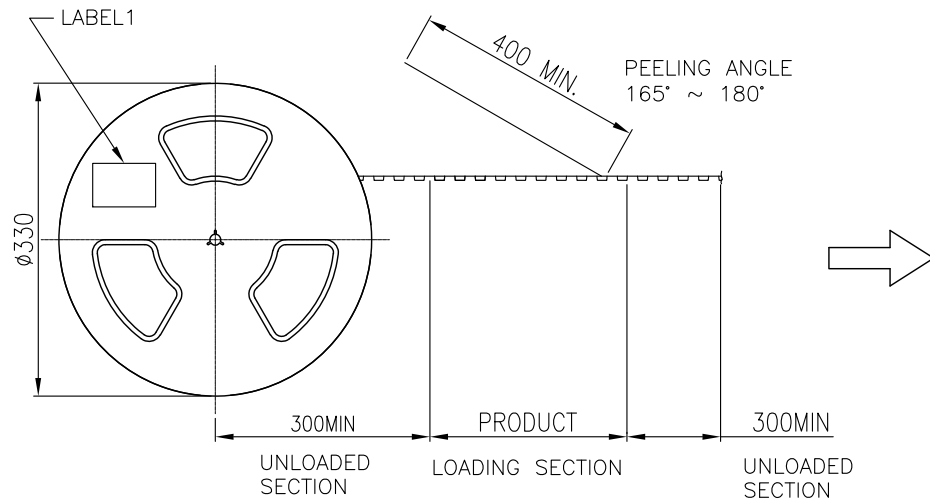


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CONN. PART NO.	CONN. QTY./REEL	REEL QTY./CARTON	CONN. QTY./CARTON
TCR60-32120805-D5	1100	10	11000 PCS



TOTAL 10LAYERS



UNLESS OTHERWISE SPECIFIED TOLERANCES				深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO., LTD			
DECIMALS:	ANGLES:	TITLE		Type.C 8PIN L=6.5MM CONN. RECPTACLE			
X :±0.5	X :±2°	DWN	chenjun	PART NO. TCR60-32120805-D5			
X.X :±0.30	X.X :±1°	CHKD	chenjun	SCALE:1:1	UNIT: mm		
X.XX :±0.20		APVD	Kevin.d	SIZE: A4	SHEET: 30F3	REV: A	
X.XXX :±0.10		DRAW NO. C-DWG-TCR60-D5				CUSTOMER COPY	

深圳市精睿兴业科技有限公司

产 品 规 格 书

Product Specification

(产品描述)

Product Description: TYPE C (卧式 8PIN 15u'')

(制 作 人 / 日 期)

Written/Date : 朱金斗 04/15'2026

(审 核 / 日 期)

Checked/Date: 陈少兵 04/15'2026

(核 准 / 日 期)

Approved/Date: 陈军 04/15'2026



深圳市精睿兴业科技有限公司

产品规格书

Product Specification

文件编号

Doc. No.

SPEC-TCR60-07

版本

Rev.

A

页次

Sheet

1 / 8

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2 / 9 KRCONN 深圳市精睿兴业科技有限公司	产品规格书 Product Specification	文件编号 Doc. No.	SPEC-TCR60-07
		版本 Rev.	A
		页次 Sheet	2 / 8

1. 范围 Scope

该标准适用于深圳市精睿兴业科技有限公司生产的 TYPE-C 系列连接器 TCR60 等之功能要求及测试方法。
This specification covers the requirements for product performance and test methods of KRONN's TYPE-C Series Connect to TCR60 and so on.

2. 一般规格 General Specification

- 3-1 额定电流 Current Rating
VBUS 和 GND 端子最大通过电流为 3A，其他 PIN 最大电流 0.25A
A1 ,A12,B4,B9 1.25A MAX per contact,Other pins:0.25A Max
- 3-2 额定电压 Voltage Rating
MAX 30.0V(AV)
- 3-3 工作环境 Operating Environment
温度 Temperature: -55℃~+85℃
湿度 Humidity: 80% maximum
- 3-4 储存环境 Storage Environment
温度 Temperature: -55℃~+85℃
湿度 Humidity: 70% maximum
- 3-5 测试环境 Test Environment
温度 Temperature: +15℃~+35℃
湿度 Humidity: 45%~75%
大气压 Atmospheric Pressure: 86-106KPa

3. 材料及尺寸 Material and dimensions

- 4-1 产品材料 Product Material:
塑胶主体 housing: 耐高温,热塑性材料,阻燃等级 UL94-V0, 颜色:黑色
High temperature, Thermo-plastic, Color White, UL94-V0.
端子 contact: 铜合金 Copper Alloy
外铁壳 shell: 不锈钢
中隔片 MID-PLATE: 不锈钢
- 4-2 产品尺寸及电镀规格 Product dimensions and plating:
请参考所附客户图或物料编码原则
please refer to the attached drawing or product numbering code
- 4-3 产品有害物质符合厂内 HSF 有关规定.
The harmful material should be compliance to requirement about HSF.

3 / 9 KRCONN 深圳市精睿兴业科技有限公司	产品规格书 Product Specification	文件编号 Doc. No.	SPEC-TCR60-07
		版本 Rev.	A
		页次 Sheet	3 / 8

5.产品外观 **PRODUCT APPEARANCE**

项目 ITEM	描述 Description	测试条件 Test Condition	判定基准 Decision Datum
5-1	产品外观 Examination of Product	产品外形必须符合图纸要求。	产品外观良好，无外观不良情形，产品结构及尺寸亦须符合图纸设计要求。
		Shall be confirmed with eyes in accordance with each drawing.	Outward appearance shall be good without such injurious problem and structure shall be meet the design and dimension requirement of drawing
5-2	电镀膜厚测试 Plating Thickness Measurement	1) 测试端子接触区和焊接区的镀层膜厚 2) 接触区测试点：接触点位置 3) 焊接区测试点：端子/铁壳焊脚部分中心位置	接触区： Au $\geq$ 0.76um Ni $\geq$ 2um 焊接区： Au $\geq$ 0.03um Ni $\geq$ 1.27um
		1) Test the coating thickness of the terminal contact layer and soldering area 2) Contact area test point: contact point location 3) Test point of welding area: terminal position/center of welding leg part of iron shell	Contact area: Au $\geq$ 0.76um Ni $\geq$ 2um Welding area: Au $\geq$ 0.03um Ni $\geq$ 1.27um

6. 电气特性 **ELECTRICAL PERFORMANCE**

项目 ITEM	描述 Description	测试条件 Test Condition	判定基准 Decision Datum
6-1	接触电阻 Low Level Signal Contact Resistance	与配合件相配后,测量配合件接触点到端子焊脚之间的阻值.	初始值： $\leq 30\text{ m}\Omega$
		After mating with the mating piece, measure the resistance between the contact point of the mating piece and the solder pins of the terminal.	Initial: 30 m Ω Max.

4 / 9 KRCONN 深圳市精睿兴业科技有限公司		产品规格书 Product Specification		文件编号 Doc. No.	SPEC-TCR60-07
				版本 Rev.	A
				页次 Sheet	4 / 8
6-2	绝缘阻抗 Insulation Resistance	测量相邻端子之间绝缘阻抗，施加 DC500V 电压持续 1 分钟。	初始值：≥100MΩ		
		DC 500V for 1minsec between adjacent contacts	Initial: 100MΩ Min		
6-3	耐电压 Dielectric withstanding Voltage	相邻端子之间及端子跟固定脚，铁壳之间施加 AC500V 电压，持续一分钟。	无击穿现象，漏电流<1mA		
		AC 500V for 1min sec between adjacent contacts	No breakdown phenomenon, leakage current <1mA		
6-4	温升测试 Rating	1)记录室温 2)取任意端子用治具导通，样品装配后施加额定电流3A. 3)稳定30min后测试接触区域温度值，记录差值;	Δ T≤30℃，外被无烧损熔化； 注： Δ T=测试温度值-室温		
		1) Record the room temperature 2) Take any terminal and use a jig to conduct, and apply a rated current of 3A after the sample is assembled. 3) Test the temperature value of the contact area after stabilizing for 30 minutes, and record the difference;	Δ T≤30℃，the outer cladding is melted without burning loss; Note: ΔT = test temperature value - room temperature		

7. 机械性能 MECHANICAL PERFORMANCE			
项目 ITEM	描述 Description	测试条件 Test Condition	判定基准 Decision Datum
7-1	插入/拔出力 Insertion/Withdrawal Force	以每分钟 12.5mm 速度，量测插入力	插入力：5-20N
		At a maximum rate of 12.5mm (0.492") per minute. Insertion force	Insertion Force : 5-20N
		以每分钟 12.5mm 速度，量测拔出力	拔出力：8-20N
		At a maximum rate of 12.5mm (0.492") per minute. Withdraw force	Withdrawal Force : 8-20N

5 / 9

KRCONN

深圳市精睿兴业科技有限公司

产品规格书

Product Specification

文件编号
Doc. No.

版本
Rev.

页次
Sheet

SPEC-TCR60-07

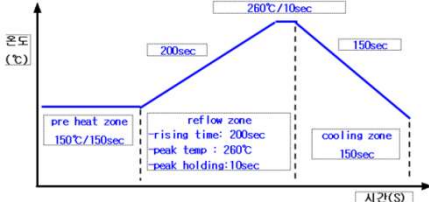
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5 / 8

7-2	机械寿命 Durability	1) 无负载条件下插拔, 10,000次, 插拔速度≤10次/min; 2) 插座必须焊接到相应的PCB板上, 且注意插座后面不可有物体挡住胶芯;	1) 接触阻抗, 插拔力符合要求; 2) 插座本体无机械及电气损坏: 胶芯不可有变形或损坏, 端子不可有断裂或翘起
		1) Insertion and extraction under no-load conditions, 10,000 times, insertion and extraction speed ≤ 10 times/min; 2) The socket must be soldered to the corresponding PCB board, and pay attention that there is no object behind the socket to block the rubber core;	1) The contact resistance and insertion force meet the requirements; 2) There is no mechanical and electrical damage to the socket body: the rubber core must not be deformed or damaged, and the terminals must not be broken or lifted
		Test the maximum strength as pull test specimen away from the PCB board perpendicularly	≥50N, no appearance damage
7-3	可焊性 Solder ability	1) 端子焊接部分浸入锡池。 2) 浸入时间: 3~5s; 3) 锡池温度: 245±5℃	1) 浸入部分 95%以上表面被锡覆盖 2) 本体无损伤
		1) The soldered part of the terminal is immersed in the tin pool. 2) Immersion time: 3~5s; 3) Tin bath temperature: 245±5℃	1) More than 95% of the surface of the immersed part is covered with tin 2) The body is not damaged
7-4	胶芯强度 Housing strength	过顶胶芯(避空止位), 施加力量 10kg, 测试速度 10mm/min, 持续时间 1min	常规测试: 10kg 塑胶胶芯不可后退 极限测试: 每增加 1kg 测试至胶芯后退的最大力量
		Over the top rubber core (avoiding stop position), the applied force is 10kg, the test speed is 10mm/min, and the duration is 1min	Routine test: 10kg plastic core cannot be retreated. Limit test: each additional 1kg test to the maximum force of the rubber core to retreat

6 / 9 KRCONN 深圳市精睿兴业科技有限公司	产品规格书 Product Specification	文件编号 Doc. No.	SPEC-TCR60-07
		版本 Rev.	A
		页次 Sheet	6 / 8

8. 环境特性 ENVIROMENT PERFORMACE			
项目 ITEM	描述 Description	测试条件 Test Condition	判定基准 Decision Datum
8-1	恒温恒湿 High temperature and humidity	1) 温度: 55℃±2℃, 湿度: 93±2%RH, 2) 时间: 96h。 3) 常温恢复 1h~2h 4) 实验前后测试接触阻抗、绝缘阻抗, 并记录 4 组数据。	1) 产品无变形, 氧化、锈蚀、变色、镀层无剥落, 起泡等不良现象(需拆开铁壳检查内部端子状况); 2) 接触阻抗, 绝缘阻抗符合要求。
		1) Temperature: 55℃±2℃, Humidity: 93±2%RH, 2) Time: 96h. 3) Normal temperature recovery 1h~2h 4) Test the contact resistance and insulation resistance before and after the experiment, and record 4 sets of data.	1) The product has no deformation, oxidation, rust, discoloration, peeling off of the coating, blistering and other undesirable phenomena (the iron shell needs to be disassembled to check the internal terminal condition); 2) Contact resistance and insulation resistance meet the requirements.
8-2	盐水喷雾 Salt Spray	1) NaCl%: 5% ±1 PH 值 6.5~7.2 ; 2) 试验槽温度: 35℃±1℃。 3) 时间: 48h; 4)实验后用清水清洗,并在 55℃±2℃烘干	1)接触阻抗符合要求; 2)产品无变形, 氧化、锈蚀、变色、镀层无剥落, 起泡等不良现象(需拆开铁壳检查内部端子状况);
		1) NaCl%: 5% ±1 PH value 6.5~7.2; 2) Test tank temperature: 35℃±1℃. 3) Time: 48h; 4) Wash with water after the experiment, and dry at 55℃±2℃	1) The contact impedance meets the requirements; 2) The product has no deformation, oxidation, rust, discoloration, peeling off of the coating, blistering and other undesirable phenomena (the iron shell needs to be disassembled to check the internal terminal condition);
8-3	耐焊热性 Resistance to Reflow Soldering Heat	1) 量测样品所有焊脚的共面度 2) 样品过回流焊炉 2 次后, 再次量测样品所有焊脚共面度	产品无变形, 翘曲现象, PIN 脚共面度不大于 0.10mm。

7 / 9 KRCONN 深圳市精睿兴业科技有限公司		产品规格书 Product Specification		文件编号 Doc. No.	SPEC-TCR60-07
				版本 Rev.	A
				页次 Sheet	7 / 8
		1) Measure the coplanarity of all solder legs of the sample 2) After the sample has passed through the reflow oven twice, measure the coplanarity of all solder legs of the sample again 	The product has no deformation and warpage, and the coplanarity of PIN feet is not more than 0.10mm.		
8-4	冷热冲击	-40℃~75℃高温 30 分钟，低温 30 分钟 96cycles	1、无机械破坏和松脱 2、无性能变化 接触阻抗：Δ≤10mΩ 绝缘阻抗：≥100MΩ		
		-40℃~75℃ high temperature 30 minutes, low temperature 30 minutes 96 cycles	1. No mechanical damage and loosening 2. No performance change Contact impedance：Δ≤10mΩ Insulation resistance：≥100MΩ		
8-5	高温高湿	85℃/85%湿度，120H	1、无机械破坏和松脱 2、无性能变化 接触阻抗：Δ≤10mΩ 绝缘阻抗：≥100MΩ		
		85℃/85% humidity, 120H	1. No mechanical damage and loosening 2. No performance change Contact impedance：Δ≤10mΩ Insulation resistance：≥100MΩ		

