Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued 2020-6-10	
2.00mm Ditab SCT2020 Saving Connector Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

This specification is referred to the 2.00mm series wire to board connector			
索引【INDEX】			
1. 适用范围 【Scope】			
2. 规格与料号 【Spec and Part number】			
3. 材质与表面处理 【Disposal of Material and surface】			
4. 额定等级 【Ratings and applicable wires】			
5. 性能【 Performance 】			
5-1. 电气的性能【Electrical Performance.】			
5-2. 机械的性能【Mechanical Performance】			
5-3. 环境性能及其它【Environmental Performance and Others】			
6. 综合插入力及拔出力 【 Insertion/Withdrawal Force 】			
7. 注意事项 Caution			

Sheet: 1 of 10

Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued 2020-6-10	
2.00mm Ditch SCT2020 Series Connector Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

【1.适用范围 Scope】

此种规格包括 连接器规格说明.

This Specification Covers the 2.00mm Pitch SCT2020 Series Connector Specification.

【2.规格与料号 Spec and Part number】

规格内容 Specification	产品料号 Production No.	产品图示 Picture of Product
端子/Terminal	SCT2020TLPS164 SCT2020TAPS164 SCT2020TSAPS164	
胶壳/Housing	SCT2020H-2xxBWT164	
直、弯针座/Wafer	SCT2020WV-2xxB0WT164 SCT2020WR-2xxB0WT164	
立、卧SMT针座/Wafer	SCT2020WVS-2xxF1BE164	
		_
		Sheet: 2 of 10

Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]: Date Issued 202		2020-6-10
2.00mm Ditch SCT2020 Series Connector Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

【3.材质与表面处理 Disposal of Material and surface】

规格内容 Specification		材质 Materials	表面处理 Disposal of Surface
端二	子/Terminal	磷青铜/Phosphor Bronze	镀锡 Tin Plating
胶	壳/Housing	PA66 UL94-V0	颜色:白色 Color: White
直、弯针座 /90°180°	塑胶 Plastic	PA66 UL94-V0	颜色:白色 Color: White
DIP Wafer	插针 Contact	黄铜/Brass	镀锡 Tin Plating
	塑胶 Plastic	LCP UL94-V0	颜色:米色 Color: Beige
立贴针座 /180°SMTW afer	插针 Contact	黄铜/Brass	镀锡 Tin Plating
	焊护耳 Solder tab	黄铜/Brass	镀锡 Tin Plating

(上述参数请以工程图为准/Please Refer to the Project drawing for the above Specification)

【4. 额定等级 Ratings and applicable wires】

项目【Item】 规格【Standard】		andard]
额定电压 Rated Voltage (Max.)	200V Max	AC/DC
额定电流 Rated Current (Max.)	3A Max	AC/DC
使用温度范围 Ambient temperature Range	-25°C~+85°C	
适用线径 Applicable wire insulation O.D	22 ~ 30AWG Insulation O.D:0.76~1.5mm	

Sheet: 3 of 10



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditch SCT2020 Series Connector Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

【5.性能 PERFORMANCE】

5-1.电气的性能 Electrical Performance.

	项目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
05-1-1	接触电阻 ContactResistance	公母配合,开放电压 20mV 以下,电流 100mA 检测连接器 A~B 区. Mate connectors, measure by dry circuit, 20mV MAX, 100mA. Initial:20milliohms M	20mΩ Max
05-1-2	绝缘阻抗 Insulation Resistance	公母配合,在相邻端子,端子与地片之间,使用 800V 的直流电,检测连接器. Mate connectors, apply 800V DC between adjacent terminalor ground.	1000 MΩ Min
05-1-3	耐电压 Dielectric Strength	公母配合,在相邻端子,端子与地片之间,使用 800V 的交流电 1分锺,检测连接器. Mate connectors, apply 800V AC for 1 minute betweenadjacent terminal or ground.	没有击穿或者出现电火花 No Breakdown and Flashover
		<u></u>	
			Sheet: 4 of 10



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditab CCT2020 Saving Compactor Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

5-2. 机械的性能 Mechanical Performance.

	项目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
05-2-1	插拨力 Insertion & Retention Force	以每分锺 25.4±3mm 的速率插入和拔出. Insert and withdraw Connectors at the speed rate of 25.4±3mm/minute. PULL PUSH	参照第 6 项 Refer to paragraph 6
05-2-2	端子保持力 Terminal/Housing Retention Force	以每分 25.4±3mm 的速率,将端子从 Housing 内轴向拔出的力量. Apply axial pull out force at the speed rate of 25.4±3mm/minute on the terminal assembled in the housing.	单一接触点: 10N MinPer contact: 10N Min
05-2-3	Pin针保持力 Pin Retention Force	以每分 25.4±3mm 的速率,将 PIN 针从 Wafer 内轴向拔出的力量. Apply axial push force at the speed rate of 25.4±3mm/minute.	单一接触点: 12N Min Per contact: 12N Min
			Sheet: 5 of 10



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditch SCT2020 Series Composter Specification	Date Issued	2024-4-24
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

5-2. 机械的性能 Mechanical Performance.

项 目 【Item】		条 件 【Test Condition】		格 rement】
			AWG线号(mm²)	Spec.N.Min.
		固定铆线后的端子,使电线与端子分离时所	22AWG(0.30mm²)	≥45N
		需的最小力量. Fix the crimped terminal, apply axial pull out force onthe wire. (Do not crimp insulation	24AWG(0.20mm²)	≥30N
	 	part).	26AWG(0.15mm²) ≥20N	≥20N
05-2-4	Terminal crimping wire strength		28AWG(0.08mm²)	≥15N
		Contact. Wire Pulling load	注>对于本规范中未指定的导线尺寸 规范与客户端定义值 Note> As for unspecified wire sizes in thisspecification define values with clients	

5-3. 环境性能 Endurance Characteristics:

Mating connectors shall be energized at rating currentuntil thermal stability is achieved, and then measuredthe temperature rise △母连接器配合后,加载额定电流直到温度上 升到稳定状态,然后再测量温升 Mating connectors shall be energized at rating currentuntil thermal stability is achieved, and then measuredthe	05-3-1	重复插拔 Repeated Insertion/ Withdrawal	以每分锺不超过 10 次的速率,将公母插拔30次. When mated up to 30 cycles repeatedly by the rate of10 cycles per minute.	接触电阻 Contact Resistance	20mΩ Max.
	05-3-2		升到稳定状态,然后再测量温升 Mating connectors shall be energized at rating currentuntil thermal stability is achieved, and then measuredthe	温升测试	30°C Max.

Sheet: 6 of 10



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Bitala CCT2000 Coming Commenter Constitution	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

5-3. 环境性能 Endurance Characteristics:

项 目 【Item】		条 件 【Test Condition】			规格 equirement】
				观 arance	无异状 No Damage
05-3-3	震动测试 Vibration	振幅: 1.5mm P-P 频率: 10-55-10 Hz/1minute 持续时间: 每轴向 2 小时 Amplitude: 1.5mm P-P Frequency: 10-55-10 Hz/1minute Duration: 2 hours in each X.Y.Z axis.	Cor	独电阻 ontact 20mΩ Max. istance	
				断 ntinuity	1 micro⊡second Max.
05-3-4	耐热性	Temperature:85±3°C Period:96 hours continuously		观 arance	无异状 No Damage
	Heat Resistance	温度: 85±3℃ 周期: 持续96小时	Cor	虫电阻 ntact 2 stance	20mΩ Max.
	耐寒性	Temperature:-25±3°C Period:96 hours continuously		外观 无异状 Appearance No Damag	
05-3-5	Cold Resistance	温度:-25±3℃ 周期:持续96小时	接触电阻 Contact 20mΩ l Resistance		20mΩ Max.
			ı	21	neet: 7 of 10



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditab SCT2020 Saving Compactor Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

5-3. 环境性能 Endurance Characteristics:

	项目 【Item】	条 件 【Test Condition】		[R	规 格 【Requirement】	
			_	观 arance	无异状 No Damage	
05.2.0	耐湿性	Temperature: 40±2°C Relative humidity:90-95%RH Period:96 hours continuously		电阻 Resistance	20mΩ Max.	
05-3-6	Humidity	温度:40±2℃ 相对湿度:90-95% 周期:持续 96小时	-	包压 : Strength	没有击穿或者出现电火 花 No Breakdown and Flashover	
				·电阻 Resistance	500 MΩ Min.	
			_	外观 无异状 Appearance No Damage		
	温度变化	-25±3°C,30min,Room temp.10-15 min Termin 温度变化 85±3°C,30min,Room temp.10-15 min Reten	Terminal	SG 保持力 //Housing on Force	满足 5-2-2 Must meet 5-2-2	
05-3-7	Temperature Cycling	Total cycle: 5 cycle -25±3°C,30分钟,放置转换时间10-15分钟 85±3°C,30分钟,放置转换时间10-15分钟 循环次数: 5次	Crimping	拉力测试 g Pull Out rce	满足 5-2-4 Must meet 5-2-4	
			接触电阻 Contact Resistance		20mΩ Max.	
05.0.0	盐雾测试	在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 24±1小时.		观 arance	无异状 No Damage	
05-3-8	Salt Spray	24±1hours exposure to a salt spray from the 5±1%solution at 35±2°C.	接触	电阻 Resistance	20 mΩ Max.	
				ę.	neet: 8 of 10	



Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditab SCT2020 Saving Compactor Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

5-3. 环境性能 Endurance Characteristics:

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】		
月期 早期 早期 早期 早期 早期 早期 早期 早期 日本		Solder Temperature:245±5°C Immersion period:2.5±0.5S 焊锡温度: 245±5°C 沉浸周期: 2.5±0.5S	浸锡性 Solder Wetting	Area of Soldering : ≥ 95% 焊锡面积 : ≥95%	
05-3-10	F 焊绵耐热性 F	Place the connector on the P.C.Board, thenimmerse the solder pin up to the surface of theboard in the solder bath at 260°C+5°C for	外观 Appearance	无异状 No Damage	
	Resistance to Soldering Heat	5士1S. 将连接器置于 PCB 板上, 然后将露出 PCB 板表面的Pin 脚部分浸入 260°C士 5°C 的锡炉中 5 士1 秒。	接触电阻 Contact Resistance	20mΩ Max.	

Sheet: 9 of 10

Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]:	Date Issued	2020-6-10
2.00mm Ditab SCT2020 Saving Compactor Specification	Date Issued	2020-6-10
2.00mm Pitch SCT2020 Series Connector Specification	Version	Α

【6.综合插入力及拔出力 INSERTION/WITHDRAWAL FORCE】<Connector mating force>

	No Latching State							
PIN 数	At Initial 初始值	At 30th 插拔 30 次		PIN 数 No.of CKT			At Initial 初始值	At 30th 插拔 30 次
No.of CKT	I.F(Kgf Max)插入 力	W.F(Kgf Max)拔出 カ			I.F(Kgf Max)插入 力	W.F(Kgf Max)拔出 カ		
2x4	25.00	1.00		2x14	53.00	16.00		
2x5	28.00	3.00		2x15	56.00	18.00		
2x6	31.00	4.00		2x16	62.00	19.00		
2x7	33.00	6.00		2x17	65.00	21.00		
2x8	36.00	7.00		2x18	68.00	22.00		
2x9	39.00	9.00		2x19	71.00	24.00		
2x10	41.00	10.00		2x20	74.00	25.00		
2x11	44.00	12.00						
2x12	47.00	13.00						
2x13	50.00	15.00						

【7. 注意事项 Caution】

plastic because of characteristics with water after package is opened should avoid exposure to, the temperature is higher than 30 °C, humidity is higher than 60%RH inthe environment, and in the 24 hours after all after use, to prevent subsequent reflow,wave soldering process to produce foaming phenomenon of deformation

塑料因具有吸水之特性包装拆封后应避免暴露于,温度高于 30℃,湿度高于 60%RH 的环境中,并在拆封后 24小时内全数使用完毕,防止后续回流焊、波峰焊制程产生起泡变形现象

Sheet: 10 of 10