Product Specification [产品规格书]:	Document No	**PS-2517-01**
Subject [主题]:	Date Issued	**2013/01/10**
2.50mm Pitch SCT2517 Series Connector Specification	Date Revised	**2020/01/04**
	Version	**A**

This specification is referred to the 2.50mm series board in connector

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【1.适用范围 Scope】

此种规格包括 2.50mm Pitch SCT2517 Series 连接器规格说明.

This Specification Covers the 2.50mm Pitch SCT2517 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	SCT2517TRBS109 SCT2517TVPS109	
胶壳/Housing	SCT2517HR-xxxWT126 SCT2517HV-xxxWT126	

【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**
端子/Terminal	磷铜/Phosphor Bronze	Tin Plated: Over 100μ″ .Nickel: Over 50μ″ .
胶壳/Housing	PA66	UL 94V-0/2

（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】	
额定电压 Rated Voltage (Max.)	250V	[AC/DC]
额定电流 Rated Current (Max.)	2.5A	
使用温度范围 Ambient temperature Range	-40℃~+105℃	
适用线径 Applicable wire insulation O.D	AWG#22~28	Insulation O.D. 1.60mm(Max.)

【 *升温时含端子.Including terminal temperature rise. 】

【5.性能 PERFORMANCE】

5-1. 电气的性能 Electrical Performance.

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】
5-1-1	绝缘阻抗 Insulation Resistance	公母配合,在相邻端子之间,使用 500V 的直流电,检测连接器. Mate connectors, apply 500V DC between adjacent terminal or ground. (Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond.B)	1000 Megohms Min.
5-1-2	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 between adjacent terminal or ground. (Based upon EIA-364-20A / MIL-STD-202 Method 301)	不出现中断等情况 No Breakdown and Flashover
5-1-3	铆线后端子接触阻抗 Contact resistance on crimped portion	铆线后之端子,开放电压 20mV 以下,电流 10mA 检测连接器. Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.	10 milliohms Max.

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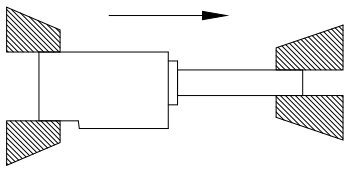
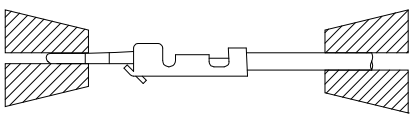
5-2. 机械的性能 Mechanical Performance.

<table>
<tr><th colspan="2">项 目
【Item】</th><th>条 件
【Test Condition】</th><th colspan="4">规 格
【Requirement】</th></tr>
<tr><td rowspan="2">5-2-1</td><td rowspan="2">端子保持力
Terminal/
Housing
Retention Force</td><td>以每分 50±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 50±3mm/minute on the terminal assembled in the housing.</td><td colspan="4" rowspan="2">9.8N {1.0kgf} Min.</td></tr>
<tr><td>  </td></tr>
<tr><td>5-2-2</td><td>端子插入力
Terminal Insertion Force</td><td>铆线后之端子插入 Housing 所需最大力量.
Insert the crimped terminal into the housing.</td><td colspan="4">9.8N {1.0kgf} Max.</td></tr>
<tr><td rowspan="3">5-2-3</td><td rowspan="3">端子压着强度
Crimped contact</td><td rowspan="2">固定铆线后的端子，使电线与端子分离时所需的最小力量.
Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part).</td><td>AWG 线号
(平方毫米)</td><td>#22
(0.35 mm²)</td><td>#24
(0.22mm²)</td><td>#26
(0.13 mm²)</td></tr>
<tr><td>Spec.
kgf
Min.</td><td>5.0</td><td>3.0</td><td>2.0</td></tr>
<tr><td>  </td><td colspan="4">Note> As for unspecified wire sizes in this specification define values with clients</td></tr>
</table>

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5-3. 环境性能及其它 Environmental Performance and Others.

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】	
5-3-1	温升测试 Temperature Rise	公母连接器配合后，加载额定电流直到温度上升到稳定状态，然后再测量温升（EIA364-70,Method 1） Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the termperature rise.（EIA364-70,Method 1）	温升测试 Temperature rise	30℃ Max.
5-3-2	振动测试 Vibration test	振幅: 1.5mm P-P 时间: 20~200~20 Hz in 3minute 持续时间: 每轴向 3 小时 加速度：44m/S^2 开放电压：20mV 以下 开放电流：10mA 以下 Amplitude: 1.5mm P-P Sweep time: 20~200~20 Hz in 3 minute Duration: 3 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A)	外观 Appearance	无异状 No Damage
			瞬断 Discontinuity	1 micro-second Max.
			电压降落 Voltage Drop	20mV/A Max
5-3-3	冲击测试 Shock test	在 X.Y.Z 上 6 个方向上,以 981m/s^2(100G 的力量)冲击下各 3 回. 作用时间：6ms 981m/s^2{100G}, 3 strokes in each X.Y.Z. axes. Operation time:6ms (Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond. A)	外观 Appearance	无异状 No Damage
			瞬断 Discontinuity	1 micro-second Max.
5-3-4	耐寒性 Cold Resistance	-40±5℃,96 hours. (Based upon EIA-364-105)	外观 Appearance	无异状 No Damage
5-3-5	耐热性 Heat Resistance	105±2℃,96 hours. (Based upon MIL-STD-202 Method 108A Cond.A)	外观 Appearance	无异状 No Damage
5-3-6	耐湿性 Humidity	温度: 40±2℃ 湿度: 90~95%(RH) 持续时间: 96 hours	外观 Appearance	无异状 No Damage

		Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)	耐电压 Dielectric Strength	Must meet 5-1-2
			绝缘阻抗 Insulation Resistance	500 Megohms Min.
5-3-7	盐水喷雾 Salt Spray	在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 48±1 小时. 48±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃. (Based upon EIA-364-26B/MIL-STD-202 Method 101D Cond.B).	外观 Appearance	无异状 No Damage
5-3-8	焊锡附着性 Solder-ability	焊接时间: 3~5 秒. 焊接温度: 245±5℃. Soldering Time: 3~5second. Solder Temperature: 245±5℃. (Based upon EIA-364-52)	Solder Wetting	浸渍面积需 95%以上 95% of immersed area must show no voids, pin holes.

6.测试顺序 **QUALIFICATION TEST SEQUENCE**

Item 项目	DESCRIPTION 叙述	SEQUENCE 顺序											METHOD 方法
		A	B	C	D	E	F	G	H	I	J	K	
1	Examination of product 外观检验	1，3	1，4	1	1	1	1，7	1，7	1，7	1，3	1，3	1，3	
2	Insulation resistance 绝缘阻抗						2，5	2，5	2，5				5-1-1
3	Dielectric withstanding Voltage 耐电压						3，6	3，6	3，6				5-1-2
4	铆线后端子接触阻抗 Contact resistance on crimped portion										2		5-1-3
5	端子保持力 Terminal/Housing Retention Force			2									5-2-1
6	端子插入力 Terminal Insertion Force				2								5-2-2
7	端子压着强度 (Crimped contact)					2							5-2-3
8	TEMPERATURE RISING 温升测试	2											5-3-1
9	Vibration 振动测试		2										5-3-2
10	冲击测试 Shock test		3										5-3-3
11	耐热性 Heat Resistance						4						5-3-4
12	耐寒性 Cold Resistance							4					5-3-5
13	耐湿性测试 Humidity								4				5-3-6
14	Salt spray 盐水喷雾									2			5-3-7
15	Solderability 沾锡性											2	5-3-8