

Product Specification [产品规格书]:	ISSUED BY: Engineering Dept	
Subject [主题]: 1.58mm Pitch 7725 Series Connector Specification	Date Issued	
	Date Revised	

This specification is referred to the 1.58mm series wire to wire connector

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### 【1.适用范围 Scope】

此种规格包括 1.58mm Pitch 7725 Series 连接器规格说明.

This Specification Covers the 1.58mm Pitch 7725 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	X7725TF-PSN X7725TM-PSN	NONE
胶壳/Housing	X7725HF-XX-N2 X7725HM-XX-N2	NONE

### 【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 黄铜/Brass	SN: Tin Plated: Over 70 $\mu$ " .Nickel: Over 30 $\mu$ " . SNB: Tin Plated: Over 40 $\mu$ " .Nickel: Over 10 $\mu$ " .
胶壳/Housing	PA66	UL 94V-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.)	5.0A	
使用温度范围 Ambient temperature Range	-25℃ ~ +85℃	
适用线径 Applicable wire insulation O.D	AWG 20#~24#、 Insulation O.D. 1.85mm(Max.)	

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

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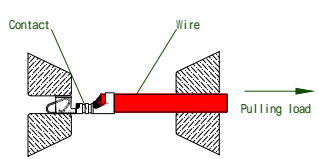
### 【5.性能 PERFORMANCE】

#### 5-1. 电气的性能 Electrical Performance.

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】
5-1-1	接触阻抗 Contact Resistance	公母配合,开放电压 20mV 以下,电流 10mA 检测连接器 A~B 区. Mate connectors, measure by dry circuit, 20mV MAX, 10mA.  (Based upon EIA-364-06A).	Initial: 10 milliohms Max. After Test: 20 milliohms Max.
5-1-2	绝缘阻抗 Insulation Resistance	公母配合,在相邻端子,端子与地片之间,使用 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.
5-1-3	耐电压 Dielectric Strength	公母配合,在相邻端子,端子与地片之间,使用 1500V 的交流电 1 分钟,检测连接器. Mate connectors, apply 1500V 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
5-1-4	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.

项目 【Item】	条件 【Test Condition】	规格 【Requirement】			
5-2-1 插拔力 Insertion & Retention Force	以每分钟 25.4±3mm 的速率插入和拔出。 Insert and withdraw Connectors at the speed rate of 25.4±3mm/minute.	初次插入力最大值：1.00kgf 30次拔出力最小值：0.10kgf (FOR PER PIN)			
5-2-2 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.	14.7N {1.5kgf} Min.			
5-2-3 端子插入力 Terminal Insertion Force	铆线后之端子插入 Housing 所需最大力量。 Insert the crimped terminal into the housing.	14.7N {1.5kgf} Max.			
5-2-4 端子压着强度 Tensile strength (Crimped connections)	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).	AWG#	#20	#22	#24
		Spec.kgf. Min.	6.0	5.0	3.0
		Note> As for unspecified wire sizes in this specification define values with clients			

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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	重复插拔 Repeated Insertion/ Withdrawal	以每分钟不超过 10 次的速率,将公母插拔 30 次。 When mated up to 10 cycles repeatedly by the rate of 30 cycles per minute.	接触阻抗 Contact Resistance	20 milliohms Max.
5-3-2	温升测试 Temperature Rise	公母对插后,在通过额定电流下,所测定的温度。 Carrying rated current load. (UL 1977)	温升测试 Temperature rise	30℃ Max.
5-3-3	耐振动性 Vibration	振幅: 1.5mm P-P 时间: 10~55~10 HZ in 1 minute 持续时间: 每轴向 2 小时 Amplitude: 1.5mm P-P Sweep time: 10~55~10 HZ in 1 minute Duration: 2 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
			接触阻抗 Contact Resistance	20 milliohms Max.
			瞬断 Discontinuity	1 micro- second Max.
5-3-4	耐冲击性 Shock	在 X.Y.Z 上 6 个方向上,以 490m/s <sup>2</sup> (50g 的力量)冲击下各 3 回.490m/s <sup>2</sup> {50G}, 3 strokes in each X.Y.Z. axes. (Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	20 milliohms Max.
			瞬断 Discontinuity	1 micro- second Max.
5-3-5	耐热性 Heat Resistance	85±2℃,96 hours. (Based upon MIL-STD-202 Method 108A Cond.A)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	20 milliohms Max.
5-3-6	耐寒性 Cold Resistance	-25±5℃,96 hours. (Based upon EIA-364-105)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	20 milliohms Max.

# XKB INDUSTRIAL PRECISION CO., LIMITED

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项目 【Item】	条件 【Test Condition】	规格 【Requirement】	
5-3-7 耐湿性 Humidity	温度: 40±2℃ 湿度: 90~95%(RH) 持续时间: 96 hours Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)	外观 Appearance	无异状 No Damage
		接触阻抗 Contact Resistance	20 milliohms Max.
		耐电压 Dielectric Strength	Must meet 5-1-3
		绝缘阻抗 Insulation Resistance	100 Megohms Min.
5-3-8 温度变化 Temperature Cycling	从-55℃持续30分钟升至+85℃持续30分钟,循环5次. 5 cycles of: a) -55℃ 30 minutes. b) +85℃ 30 minutes. (Based upon EIA-364-32B)	外观 Appearance	无异状 No Damage
		接触阻抗 Contact Resistance	20 milliohms Max.
5-3-9 盐水喷雾 Salt Spray	在温度 35±2℃, 盐水浓度 5±1% 下, 盐水喷雾 24±1 小时. 24±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃. (Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B). 注: 此测试只适用于先冲后镀产品 Note: this test is only applicable to sprinted after plating products	外观 Appearance	无异状 No Damage
		接触阻抗 Contact Resistance	20 milliohms Max.