

\* 7920 SERIES PC BOARD CONNECTORS SYSTEM \*

This specification describes the characteristics, test condition and particular sanctions applicable to LEOCO 7920 series for Internal Power Supplies.

1. Construction and dimensions shall be in accordance with the referenced drawings.

2. Characteristics:

Current rating: 15A for AWG#16,  
18A for AWG#14,  
20A for AWG#12

Voltage rating: 600V AC DC

Temperature rating: -55°C ~ +85°C

3. Electrical performance 电气性能:

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求
3.1	Contact Resistance 接触阻抗	It should be tested in accordance with method EIA-364-23.	15mΩ max.
3.2	Insulation Resistance 绝缘电阻	In accordance with EIA-364-21, DC 1000V shall be applied between contacts and between an individual contact and a case for one minute	1000MΩ min
3.3	Withstand Voltage 耐电压	2500V AC is applied 1 minute	No flashover or breakdown

4. Mechanical Performance 机械性能 :

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求
4.1	Contact Insertion Force 接触端子插入力	A steel pin of 1.6x0.8±0.002thickness.	0.3~10 N
4.2	Contact Withdrawal Force 接触端子拔出力	A steel pin of 1.6x0.8±0.002thickness.	0.3~10 N
4.3	Terminal crimping tensile force 端子铆合拉力	Pulling load shall be applied between correctly crimped contact and wire at a constant speed. Pulling speed: 25 mm / minute.	AWG #14: 22.7Kgf Min AWG #16: 13.6Kgf Min

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Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求				
4.4	Pin retention Force Pin 保持力	Pull out at speed 25+/-3 mm per minute from header's base.	2.0 kgf min.				
4.5	Mating (with lock) 公母匹配插入力(带锁)	Socket with lock pushed into wafer at speed 25+/-3 mm per minute.	3.0kgf Max (For 2P) 4.0kgf Max (For 3P) 5.0kgf Max (For 4P) 6.0kgf Max (For 5P)				
4.6	Unmating (with lock) 公母匹配拔出力(带锁)	Socket with lock pulled out at speed 25+/-3 mm per minute from wafer.	4.5kgf Min				
4.7	Mating (without lock) 公母匹配插入力(不带锁)	Socket without lock pushed into wafer at speed 25+/-3 mm per minute.	1.5kgf Max (For 2P) 2.5kgf Max (For 3P) 3.5kgf Max (For 4P) 4.5kgf Max (For 5P)				
4.8	Unmating (without lock) 公母匹配拔出力(不带锁)	Socket without lock pulled out at speed 25+/-3 mm per minute from wafer.	0.6 kgf Min				
4.9	Durability 持久性	30 mating cycles. Mating and unmating speed 25+/-6 mm per minute	Contact resistance: No more than 20mΩ。				
5. Environmental Performance 环境性能 :							
Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求				
5.1	Vibration 振动性	Frequency 10 to 55Hz, single amplitude 0.75mm, at 2 hour, for 3 direction	No electrical discontinuity of 1 μ s or greater				
5.2	Shock 冲击性	Accelerated velocity: 490m/s <sup>2</sup> for 11 ms, half-sine wave in 3 direction, 3 times for each direction.	No electrical discontinuity of 1 μ s or greater				
5.3	Humidity 耐湿性	Test method EIA-364-31. Temperature: 40±2 °C Humidity: 90 ~ 95 % (RH) Period: 96 hours.	Contact resistance: No more than 20mΩ。				
			Appearance: No damage				
5.4	Temperature Cycling 温度循环测试	One cycle consists of: (1)-55°C: 30min (2)5 to 35°C: 5 min (3)85°C: 30 min. (4) 5 to 35°C: 5 min. For 5 cycles。	Appearance: No damage				
			Contact resistance: No more than 20mΩ。				

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Item 项目	Description 内容	Test Method & Condition 测试方法及条件		Requirement 需求			
5.5	Solder ability 沾锡特性	Connector termination ends shall be checked for solder ability in accordance with method EIA-364-52. Solder temperature :245±5°C Immersion period:5±0.5sec.		Minimum:95% of Immersed area. The resin parts should withstand the temperature and resist melting.			
5.6	Solder heat Resistance 耐焊接热	Wave soldering: 260°C, 10sec Hand soldering :temperature of soldering iron at 300°C for 3 seconds		The resin parts should withstand the temperature and resist melting.			
5.7	Temperature rise 温升测试	Mate connector:Measure the temperature rise at rated current after 4 hour. Test method:EIA-364-70		50°C max			
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