LEOCO CORPORATION	PRODUCTION SPECIFICATION	No.	S-96-5300-3

＊ 5300 F Series and 5300 M Series Connector System ＊

This product specification contains the test method, the general performance and requirements For wire to wire power connector with 5300 F series receptacle connector and mates with 5312 crimp terminal,5300 M series plug connector mates with 5311 crimp terminal.

1. Construction and dimensions shall be in accordance with the referenced drawings.
产品结构和尺寸依据所提供的产品图面.

2. Characteristics 特性:

Current rating 额定电流: 7A AC
Voltage rating 额定电压: 250V DC
Temperature rating 额定温度: -25℃ ~ +105℃
Applicable wire 适用线材: conductor construction size #16 ~ #20

3. Electrical performance 电气特性:

ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需 求
3-1	Contact Resistance 接触阻抗	It should be tested in accordance with method 3004.1 of MIL-STD-1344A.	Initial:20 mΩ max. After environmental Test:40 mΩ max.
3-2	Insulation Resistance 绝缘阻抗	It should be tested in accordance with Method 3003.1 of MIL-STD-1344A. or method 302,condition B of MIL-STD-202F	Initial :1000 MΩ min. After humidity and thermal shock test: 500MΩ min.
3-3	Dielectric Withstanding Voltage 耐电压	Unmated connectors shall be tested in Accordance with method 3001.1 of MIL-STD-1344A when the AC 1500 V rms for one minute applied between adjacent contacts.	No evidence of break-Down and flashover

4. Mechanical Performance 机械特性:

ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需 求
4-1	Crimp Tensile Strength 铆合张力强度	Pulling load shall be applied between Correctly crimped contact and wire at a constant speed. Pulling speed: 25 mm / minute.	AWG #16: 12.0 kgf min AWG #18: 10.0 kgf min. AWG #20: 8.0 kgf min.
4-2	Contact Insertion Force 接触插入力	The force required to insert a contact into a housing. Inserting speed: 25 mm / minute.	1.00kgf max.
4-3	Contact removal Force 接触拔出力	Crimped contact mounted in a housing shall be pulled in an alignment at a constant speed of 25 mm / minute.	3.0 Kgf min.
4-4	Insertion Force 插入力	Housing with contact mating plug at a constant speed of 25 mm / minute.	1.5 kgf max
4-5	Withdrawal Force 拔出力	Housing with contact mating header, Pull out from header at speed 25 mm / minute.	350 gram min.
4-6	Durability 耐久性	It should be tested in accordance with method 2016 of MIL-STD-1344A. Connector shall be subjected to 100 cycles of insertion and withdrawal	No defects. Contact resistance shall be 20mΩ max

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ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需　　求
4-7	Vibration 振动测试	The connector mated PCB shall be vibrated in accordance with method 2005.1 of MIL-STD-1344A test condition B. There shall be no current discontinuity longer than 1 microsecond during the test. Frequency:10-55-10 Hz/min. Amplitude:1.52mm Period:2 hours for each direction.	No evidence of loosening of parts or electric discontinuity. Contact resistance less than twice of initial.
5. Environmental　Performance 环境特性:			
ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需　　求
5-1	Humidity 耐湿性	The unmated connector shall be tested in accordance with method 1002.2 of MIL-STD-1344A test procedure type I condit-ion B. Temperature: 40±2 °C Humidity: 90 ~ 95 % (RH) Period: 96 hours.	No damage. Contact resistance less Than twice of initial. Insulation resistance: to pass para. 3-2. Dielectric withstand-ing voltage: to pass para 3-3
5-2	Thermal shock 冷热冲击	Connector shall be subjected to thermal shock cycling in accordance with method 107E.of MIL-STD-202F condition B.one cycle consists of:-25°C for 30 minutes. +105°C for 30 minutes. Times of cycle:25 cycles.	No damage. Contact resistance less Than twice of initial. Insulation resistance: to pass para. 3-2. Dielectric withstand-ing voltage: to pass para 3-3
5-3	Salt Spray 盐雾试验	Connector shall be tested in accordance with method 1001.1 of MIL-STD-1344A condition B .Temperature :35±2 ℃ Density:5% in weight. Period:48 hours	No damage. Contact resistance less than twice of initial
5-4	Solderability 着锡性	Connector termination ends shall be checked for solderability in accordance with method 208 of MIL-STD-202F. Solder temperature : 245±5℃ Immersion period:5±0.5 sec.	No damage. Minimum:95% of immersed area.
5-5	Resistance to soldering heat 附着耐热性	Specimen shall be mounted on PCB. Solder temperature : 260±5℃ Immersion period:5±0.5 sec.	No damage and deformation.

APPR BY:	CHKD BY:	SPEC BY: