

LEOCO CORPORATION	PRODUCTION SPECIFICATION	No.	S-90-5000-2
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* 5000 & 5001 /5002 SERIES CONNECTORS SYSTEM *

This specification describes the characteristics , test condition and particular sanctions applicable to LEOCO 5000 series connector socket ,5001,5002 series male pin header and usage crimp terminal.

1.ELECTRICAL PERFORMANCE 电气特性:

Item	Description 内容	Test Method & Condition 测试方法与条件	Requirement 需求
1-1	Rated voltage and current 额定电压和电流	-	AC 250V 7A DC 250V 7A
1-2	Contact Resistance 接触阻抗	Dry circuit of DC 50mv 50mA max	20 miliohms max
1-3	Dielectric Strength 耐电压	When applied AC1500 V 1 minute between adjacent terminal	No change
1-4	Insulation Resistance 绝缘阻抗	When applied DC500V between adjacent terminal or ground	1000 Megaohms min

2. Mechanical Performance 机械特性:

Item	Description 内容	Test Method & Condition 测试方法与条件	Requirement 需求
2-1	Wire Size 线材规格	Specified wire size	Accepts AWG#26-#18
2-2	Terminal crimp strength 铆合张力强度	When crimped AWG#18 size wire	10.0Kg min
		When crimped AWG#20 size wire	8.0Kg min
		When crimped AWG#22 size wire	6.3Kg min
		When crimped AWG#24 size wire	4.5Kg min
		When crimped AWG#26 size wire	2.7Kg min
2-3	Terminal insertion force 接触插入力	Insertion speed 25+/-3mm per minute into housing	950 gram per contact(max.)
2-4	Terminal removal force 接触拨出力	Retention speed 25+/-3mm from housing per minute	3.0 kgs min.
2-5	Insertion force 插入力	Connector socket with terminal mating header at speed 25+/-3mm per minute.(housing lock should be removed before test)	See parameters 6
2-6	Withdrawal force 拨出力	Connector socket with terminal pull out from header test under same condition as above	See parameters 6

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2-7	Durability 耐久性	When mated up to 60 cycles by the rare of 10 cycles per minute.	Contact resistance : less than twice of initial	
2-8	Pin retention force 保持力	Push pin from insulator base at speed 25+/-3mm per minute	2.0 kgs min.	
3.Environmental Performance 环境特性:				
Item	Description 内容	Test Method & Condition 测试方法与条件	Requirement 需求	
3.1	Temperature rise 温升测试	Then carried the rated current	30 Deg . C max	
3.2	Vibration 振动性	1.5mm 10-55-10HZ/minute each 2 hours for X,Y and Z directions	Discontinuity :1 micro second max. Appearance :no damage	
3.3	Shock 冲击性	50G,each 3 times for X,Y&Z directions Applying 0-1 A-DC	Discontinuity:1 micro second max. Appearance : no damage	
3.4	Solderability 着锡性	Soldering time:5+/-0.5 second. Soldering pot:245+/-5 Deg C	Mininum:75% of immersed area.	
3.5	Resistance to soldering heat 附着耐热性	Soldering time:5+/-0.5 second. Soldering pot:260+/-5 Deg C	No damage	
3.6	Heat aging 热老化实验	85+/-2 Deg.C;500 hours	No damage	
3.7	Humidity 耐湿性	40+/-2 Deg.C,90-95% RH,96 HRS Measurement must be taken within 30 min . after tested	Contact resistance : Less than twice of initial.	
			Dielectric strength : to pass para1-3	
			Appearance : No damage	
3.8	Temperature cycling 温度循环测试	One cycle consists of: (1)-25+/-3 Deg.C 30min (2)Room Temp.10-15 min (3)85+/-2 Deg.C 30 Min (4)Room temp.10-15 min	Appearance : No damage	
			Contact resistance Less than twice of initial.	
3.9	Slat spray 盐雾实验	Temperature:35+/-3 Deg.C Solution:5+/-1% Spray time :48+/-4 hours Measurement must be taken after water rince.	Appearance :No damage	
			Contact resistance : Less than twice of initial.	

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3.10	S02 耐酸性	24 hours in sulfur dioxide gas(s02)50+/-5PPMat 40+/-2 deg.C	Contact resistance :Less than twice of initial
3.11	NH4 耐碱性	40 minutes in saturated ammonia gas by 28% liquid ammonia at 25+/-2 DEG.C	Appearance :No damage Contact resistance :Less than twice of initial

4.AMBIENT TEMPERATURE RANGE 温度范围: -25 TO +105 degree .C

5.CONSTRUCTION AND DIMENTIONAL 结构与尺寸 :See attached drawing.

6.INSERTION FORCE(I.F.)&WITHDRAWAL FORCE(W.F.)

(kgf)

Number of circuits	I.F.(MAX.)	W.F.(min.)			
	Initial	Initial	6th	30th	60th
2	2.20	0.95	1.05	0.80	0.70
3	3.23	1.32	1.47	1.25	1.13
4	4.17	1.78	1.98	1.70	1.56
5	5.00	2.35	2.60	2.15	1.99
6	6.03	2.72	3.02	2.60	2.42
7	6.97	3.18	3.53	3.05	2.85
8	7.90	3.65	4.05	3.50	3.28
9	8.83	4.11	4.57	3.95	3.71
10	9.77	4.58	5.08	4.40	4.14
11	10.70	5.05	5.60	4.85	4.57
12	11.63	5.51	6.12	5.30	5.00
13	12.56	5.98	6.63	5.75	5.43
14	13.50	6.44	7.15	6.20	5.86
15	14.43	6.91	7.66	6.65	6.29
16	15.36	7.38	8.18	7.10	6.72

APPR BY:	CHKD BY:	SPEC BY:
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