## \* 2508 Series and 2509 Series Connector \*

This product specification contains the test method, the general performance and requirements For interconntection system connector. With 2508 series socket and mates with 2509 series header ,2508 series terminal.

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

产品结构与尺寸依据所提供的图面.

2. Characteristics 特性:

Current rating 额定电流: 2.5 A AC,DC Voltage rating 额定电压: 250V AC,DC Temperature rating 额定温度: -40℃ ~+105℃

Applicable wire 适用的线: conductor construction size #22 ~ #28

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.	20 mΩ max.
3-2	Insulation Resistance 绝缘阻抗	It should be tested in accordance with Method EIA-364-21	1000 MΩ min.
3-3	Dielectric Withstanding Voltage 耐电压	Unmated connectors shall be tested in accordance with method EIA-364-20 when the AC 1000 V rms for one minute applied between adjacent contacts.	No evidence of break- down and flashover

## 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	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 #22: 4.0 kgf min. AWG #24: 2.5 kgf min. AWG #26: 1.5 kgf min. AWG #28: 1.0 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.	0.6Kgf max.
4-3	Contact removal Force 接触拔出力	Contact inserted in a housing shall be pulled in an axis at a constant speed of 25 mm /minute.	1.5Kgf min.

Sheet: 1/3

LEOCO CORPORATION		PRODUCTION SPECIFICATION	No.	S-96-2508	Rev 5
Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求		nt
4-4	Post Retention Force 保持力	The end of a post shall be pushed in a perpendicular to base housing at a constant speed of 25 mm / minute. Test method:EIA-364-05	1.5 kgf min.		
4-5	Insertion Force 插入力	Housing with contact mating header at a constant speed of 25 mm / minute. Test method:EIA-364-13	Refer to paragraph 3		
4-6	Withdrawal Force 拔出力	Housing with contact mating header, Pull out from header at speed 25 mm / minute. Test method:EIA-364-13	Refer to paragraph 3		n 3
4-7	Durability 耐久性	It should be tested in accordance with method 2016 of EIA-364-09 Connector shall be subjected to 100 cycles of insertion and withdrawal.	No defects. Contact resistance shall be 20 mΩ max.		
4-8	Vibration 振动测试	The socket mated header shall be vibrated in accordance with method EIA-364-28 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. Envir	ronmental Performand	ce 环境性能:			
Item 项目	Description 内容	Test Method & Condition 测试方法及条件		Requiremer 需求	nt
5-1	Humidity 耐湿性	The unmated connector shall be tested in accordance with method EIA-364-31 test procedure type I Condition 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 withstanding voltage: to pass para 3-3		
5-2	Thermal Shock 热冲击测试	Connector shall be subjected to thermal shock cycling in accordance with method EIA-364-32 condition B. One cycle consists of:-25°C for 2 hours. +85°C for 2 hours. Times of cycle:5 cycle.	NO damage. Contact resistance: less than twice of initial. Insulation resistance: to pass para. 3-2. Dielectric withstanding voltage: to pass para 3-3		

Sheet: 2/3

LEOCO CORPORATION		PRODUCTION SPECIFICATION	No.	S-96-2508	Rev	5
Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求			
5-3	Salt Spray 盐雾测试	Connector shall be tested in accordance with method EIA-364-26 condition B.  Temperature: 35±2 °C  Density: 5 % in weight.  Period: 24 hours.	NO damage. Contact resistance less than twice of initial.		6	
5-4	Solderability 着锡性	Connector termination ends shall be checked for solderadility in accordance with method EIA-364-252.  Solder temperature: 245±5 °C Immersion period: 5±0.5 sec.	NO damage. Minimum: 95 % of immersed area.			
5-5	Resistance to Soldering Heat 耐高温焊接	Specimen shall be mounted on PCB.  Solder temperature: 260±5 °C  Immersion period: 5±0.5 sec.		damage and ormation.		

## 6、2508 Series and 2509 Series Mating force and unmating force:

Unit:Kgf

Number of	Mating Force	Unmating Force(min.)	
Circuits	Initial(max.)	Initial	30th
2	3.5	0.60	0.55
3	4.5	0.70	0.60
4	5.0	0.75	0.65
5	6.0	0.80	0.70
6	6.5	0.85	0.80
7	7.0	1.00	0.90
8	7.5	1.15	1.00
9	7.5	1.05	0.90
10	7.5	1.20	1.00
11	8.0	1.25	1.10
12	8.5	1.40	1.20
13	9.0	1.50	1.30
14	10.5	1.65	1.40
15	11.5	1.70	1.50

APPR BY: Chard CHKD BY: Angel SPEC BY: Shirley

Sheet: 3/3