LEOCO CORPORATION PRODUCTION SPECIFICATION No. S-96-2520 REV 1-7

* 2520 Series and 2521 Series Connector

This product specification contains the test method, the general performance and requirements for interconntection system connector.

With 2520 series socket and mates with 2521 series header and 2593 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: 3.0 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	DESCRIPTION	TEST METHOD & CONDITION	REQUIREMENT
项目	内容	测试方法与条件	需 求
	Contact Resistance 接触阻抗	It should be tested in accordance with method EIA-364-23	Initial: $10 \text{ m}\Omega$ max. After environmental Test: $20 \text{ m}\Omega$ max.
_	Insulation Resistance 绝缘阻抗	It should be tested in accordance with Method EIA-364-21.	Initial: 1000 M Ω min. After humidity test 500 M Ω min.
	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 机械特性:

ITEM 项目	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 #22: 6.3 kgf min. AWG #24: 4.5 kgf min. AWG #26: 2.7 kgf min. AWG #28: 1.5 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.	1.2kgf max.
4-3	Contact removal Force 接触拨出力	Crimped contact mounted in a housing shall be pulled in an alignment at a constant speed of 25 mm / minute.	2.0Kgf min.
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.	1.5 kgf min.
4-5	Insertion Force 插入力	Housing with contact mating header at a constant speed of 25 mm / minute.	0.7kgf max.
4-6	Withdrawal Force 拨出力	Housing with contact mating header, Pull out from header at speed 25 mm /minute.	0.15kgf min.

LEOC	CO CORPORATION	PRODUCTION SPECIFICATION	No. S-96-2520 REV 1-7
ITEM 项目	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需求
4-7	Mating and unmating force 插拔力	Housing with contact &header shall be mated and unmated on a same axis. it should be tested in accordance with method EIA-364-13 at a constand speed of 25mm/minutes.	See parameters 6
4-8	Durability 耐久性	It should be tested in accordance with method EIA-364-09 Connector shall be subjected to 100 cycles of insertion and withdrawal.	No defects. Contact resistance shall be 20 m Ω max.
4-9	Vibration 振动性	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 initial.
5. Env	rironmental Performar	nce 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 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 paragraph 3-2. Dielectric withstand ing voltage: to paragraph 3-3
5-2	Salt Spray 盐雾试验	Connector shall be tested in accordance with method EIA-364-26 Temperature: 35±2 °C Density: 5 % in weight. Period: 48 hours.	NO damage. Contact resistance less than twice of initial.
5-3	Solderability 着锡性	Connector termination ends shall be checked for solderadility in accordance with method EIA-364-52. Solder temperature: 245±5 °C Solder temperature: 260±5 °C (High-temperature materials) Immersion period: 5±0.5 sec.	NO damage. Minimum: 95 % of immersed area.

LEOC	O CORPORATION	PRODUCTION SPECIFICATION	No.	S-96-2520	REV	1-7
ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需求			
5-4	Resistance to Soldering Heat 耐高温焊接	Specimen shall be mounted on PCB. Solder temperature: 260±5 °C Solder temperature:280±5 °C (High-temperature materials) Immersion period: 5±0.5 sec.	NO damage and deformation.			
	冷却实验	It should be tested in accordance with method 11233 of CNS. temperature:-25±3 °C Period:96hours	Cor	lamage. Itact resistand In twice of initia		
5-6	加热干燥测试	It should be tested in accordance with method 3634 of CNS. temperature:+85±2 °C Period:96hours	Cor	lamage. Itact resistand In twice of initia		

6. Mating force and unmating force:

Unit:Kgf

Number of	Mating Force	Unmating Force(min.)	
Circuits	Initial(max.)	Initial	60th
2	2.50	0.80	0.60
3	3.00	1.00	0.70
4	3.50	1.20	0.70
5	4.00	1.20	0.90
6	4.50	1.40	1.00
7	5.00	1.40	1.00
8	5.50	1.60	1.20
9	6.00	1.60	1.20
10	6.50	1.80	1.40
11	7.00	1.80	1.40
12	7.50	2.00	1.60
13	7.50	2.00	1.60
14	8.50	2.20	1.90
15	8.50	2.40	2.00
16	9.00	2.60	2.00
17	9.00	2.60	2.20
18	9.50	2.80	2.20
19	9.50	2.80	2.40
20	10.00	3.00	2.40

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