LEOCO CORPORATION

PRODUCTION SPECIFICATION No. S-06-1010 REV

4

1010 Series And 1020 Series Connector

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

With 1010,1020 series header, 1010,1020 series housing and 1010 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: 1 A AC,DC Voltage rating 额定电压: 50V AC,DC

Temperature rating 额定温度: -40℃ ~ +105℃

Applicable wire 适用的线: conductor construction size #28 ~ #32

3. Electrical performance 电气性能:

ITEM 项目	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需 求
_	Contact Resistance 接触阻抗	It should be tested in accordance with method EIA-364-23	Initial: 20 mΩ max.
_	Insulation Resistance 绝缘阻抗	It should be tested in accordance with Method EIA-364-21.	Initial: 100 MΩ min.
	Dielectric Withstanding Voltage 耐电压	Unmated connectors shall be tested in accordance with method EIA-364-20 when the AC 500 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	TEST METHOD & CONDITION	REQUIREMENT
项目	内容	测试方法与条件	需 求
4-1	Crimp Tensile	Pulling load shall be applied between	AWG #28: 1.0kgf min.
	Strength	correctly crimped contact and wire at a	AWG #30: 0.8kgf min.
	铆合张力强度	constant speed. Pulling speed: 25 mm / minute.	AWG #32: 0.5kgf min.
4-2	Insertion force	Housing with contact mating header at a	0.75kgf max.
	插入力 	constant speed of 25 mm / minute.	
4-3	Withdrawal force 拔出力	Contact inserted in a housing shall be pulled in an axis at a constant speed of 25 mm /minute.	0.08 kgf min.
4-4	contact retention Force terminal 保持力	The crimped terminal in a housing shall be pulled in a perpendicular at a constant speed of 20mm/minute.	0.6 kgf min.

IFOC	LEOCO CORPORATION PRODUCTION SPECIFICATION No. S-06-1010 REV 4					
ITEM 项目	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件	REQUIREMENT 需求			
4-5	Pin retention Force pin 保持力	Apply axial push force at the speed rate of 25mm/minute.	0.3 kgf min.			
4-6	Durability 耐久性	It should be tested in accordance with method EIA-364-09. Connector shall be subjected to 30 cycles of insertion and withdraw	No defects. Contact resistance shall be 20 m Ω max.			
4-7	Vibration 振动性	The connector mated PCB shall be vibrated in accordance with method EIA-364-28 tested condition B. 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: $30 \text{ m}\Omega$ max.			
5. Envi	ironmental 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: 40mΩ max Insulation resistance: to paragraph 3-2. Dielectric withstanding 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: 24 hours.	NO damage. Contact resistance: 40mΩ max			
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 Immersion period: 5±0.5 sec.	NO damage. Minimum: 95 % of immersed area.			
5-4	Resistance to Soldering Heat 耐高温焊接	Specimen shall be mounted on PCB. Solder temperature: 255±5 °C Immersion period: 5±0.5 sec.	NO damage and deformation.			

LEO	CO CORPORATION	PRODUCTION SPECIFICATION	No.	S-06-1010	REV	4
ITEM	DESCRIPTION	TEST METHOD & CONDITION		REQUIREN	JENT	
	内容	测试方法与条件		需求		

6. 1010 Series Mating force and unmating force(single row):

Unit: Kgf

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Number of	Mating Force	Unmating Force
Circuits		
2	1.50	0.20
3	1.80	0.23
4	2.10	0.26
5	2.40	0.29
6	2.70	0.32
7	3.00	0.35
8	.3.30	0.38
9	3.60	0.41
10	3.90	0.44
11	4.20	0.47
12	4.50	0.50
13	4.80	0.53
14	5.10	0.56
15	5.40	0.59
16	5.70	0.62
17	6.00	0.65
18	6.30	0.68
19	6.60	0.71
20	6.90	0.74

1020 Series Mating force and unmating force(Dual row):

Unit: Kgf

Number of	Mating Force	Unmating Force
Circuits		
2x5	4.00	0.40
2x6	5.00	0.50
2x7	5.00	0.60
2x8	5.00	0.70
2x9	5.00	0.70
2x10	5.00	0.80

LEOC	O CORPORATION	PRODUCTION SPECIFICATION	No.	S-06-1010	REV	4
ITEM	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法与条件		REQUIREM 需求	MENT	

Number of	Mating Force	Unmating Force
Circuits		
2x12	6.50	0.80
2x15	8.00	1.20
2x20	10.00	1.50
2x25	12.00	1.50
2x12	6.50	0.80
2x15	8.00	1.20

APPR BY: Chard 2022.07.22 CHKD BY: SPEC BY: Angel 2022.07.22