LEOCO CORPORATION PRODUCTION PECIFICATION No. S-16-2537-1

* 2537 Series Smart-Card Connector *

This product specification contains the test method, the general performance and requirements for smart-card connector.

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

(产品结构和尺寸依据所提的产品图面)

2. Characteristics (特性):

5-2

Normal Force (正向力)

EIA-364-04

terminal

Current rating (额定电流): 0.5A

Voltage rating (额定电压): 30V DC, AC

Temperature rating (额定温度): -25℃ ~+85℃

(表观检查)drawing. No physical damage4. Electrical performance (电气特性):ItemDescription (内容)Test Method & Condition (测试方法与条件)Requirement (需求)4-1Contact Resistance (接触阻抗)EIA-364-23100 mΩ max.(接触阻抗)Subject mated contacts assembled in housing to 20 mV max. open circuit voltage at 100 mA max.4-2Insulation Resistance (绝缘阻抗)EIA-364-211000 MΩ min.(绝缘阻抗)Apply a voltage 500 VDC for 1 minute between the adjacent contacts, and between the contacts and ground in the mated connector assemblies	3. Gen	eral examination of product				
Visual Examination EIA-364-18 Meets requirements of programming of programming (表观检查) Test Method & Condition (内容) (内容) (测试方法与条件) (需求)	Item	Description	Test Method & Condition	Requirement		
A. Electrical performance(电气特性): Item		(内容)	(测试方法与条件)	(需求)		
Letern	3-1	Visual Examination	EIA-364-18	Meets requirements of product		
Item		(表观检查)		drawing. No physical damage.		
Contact Resistance	4. Elec	trical performance(电气特性	生):			
Contact Resistance (接触阻抗) Subject mated contacts assembled in housing to 20 mV max. open circuit voltage at 100 mA max.	Item	Description	Test Method & Condition	Requirement		
Subject mated contacts assembled in housing to 20 mV max. open circuit voltage at 100 mA max.		(内容)	(测试方法与条件)	(需求)		
to 20 mV max. open circuit voltage at 100 mA max. 4-2 Insulation Resistance (绝缘阻抗) Apply a voltage 500 VDC for 1 minute between the adjacent contacts, and between the contacts and ground in the mated connector assemblies 4-3 Dielectric EIA-364-20 Withstanding Apply 1000 VAC (rms) for 1 minute between Voltage the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description (内容) Test Method & Condition Requirement (清求) Test Method & Condition (需求) Test Method & Condition (需求) Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per	4-1	Contact Resistance	EIA-364-23	100 mΩ max.		
open circuit voltage at 100 mA max. 4-2 Insulation Resistance (绝缘阻抗) Apply a voltage 500 VDC for 1 minute between the adjacent contacts, and between the contacts and ground in the mated connector assemblies 4-3 Dielectric EIA-364-20 No shorting or other damages Withstanding Apply 1000 VAC (rms) for 1 minute between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (河谷) (高求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		(接触阻抗)	Subject mated contacts assembled in housing			
Household Resistance (绝缘阻抗)			to 20 mV max.			
(绝缘阻抗) Apply a voltage 500 VDC for 1 minute between the adjacent contacts, and between the contacts and ground in the mated connector assemblies 4-3 Dielectric EIA-364-20 No shorting or other damages Withstanding Apply 1000 VAC (rms) for 1 minute between Voltage the adjacent contacts, and between the (耐电压) contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition (内容) (测试方法与条件) FIA-364-13 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Mating force 0.1 kgf min			open circuit voltage at 100 mA max.			
between the adjacent contacts, and between the contacts and ground in the mated connector assemblies 4-3 Dielectric EIA-364-20 No shorting or other damages Withstanding Apply 1000 VAC (rms) for 1 minute between Voltage the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (测试方法与条件) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min	4-2	Insulation Resistance	EIA-364-21	1000 MΩ min.		
the contacts and ground in the mated connector assemblies 4-3 Dielectric EIA-364-20 No shorting or other damages Withstanding Apply 1000 VAC (rms) for 1 minute between Voltage the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		(绝缘阻抗)	Apply a voltage 500 VDC for 1 minute			
Connector assemblies			between the adjacent contacts, and between			
Harmonical Performance(机械特性): Item Description (内容) Mating Force (卡的插入力 Mate connector at a rate of 25±6mm per Harmonical Performance (中華) EIA-364-20 Apply 1000 VAC (rms) for 1 minute between the current leakage <1 mA Final Mating Force (1 mA Current leakage <1 mA EIA-364-13 Mating Force (1 mA Mating Force (1 mA Mating Force (1 mA Mating Force (1 mA Current leakage <1 mA Mating Force (1 mA Mating Force (1 mA Mating Force (1 mA Current leakage <1 mA Current le			the contacts and ground in the mated			
Withstanding Voltage the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (内容) EIA-364-13 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Apply 1000 VAC (rms) for 1 minute between the Current leakage <1 mA Current leakage <1 mA Current leakage <1 mA Current leakage <1 mA Mating Force (1 mA Current leakage <1 mA Current leakage <1 mA Mating Force (1 mA Mating Force (1 mA Mating Force (1 mA Unmating Force (1 mA)			connector assemblies			
Voltage (耐电压) the adjacent contacts, and between the contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min	4-3	Dielectric	EIA-364-20	No shorting or other damages		
contacts and ground in the mated connector assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		Withstanding	Apply 1000 VAC (rms) for 1 minute between	Current leakage <1 mA		
assemblies. 5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		Voltage	the adjacent contacts, and between the			
5. Mechanical Performance(机械特性): Item Description Test Method & Condition Requirement (内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		(耐电压)	contacts and ground in the mated connector			
ItemDescription (内容)Test Method & Condition (測试方法与条件)Requirement (需求)5-1Mating Force and Un-mating Force(卡的插入力EIA-364-13 Mate connector at a rate of 25±6mm perMating force:1.0 kgf max Unmating force 0.1 kgf min			assemblies.			
(内容) (测试方法与条件) (需求) 5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min	5. Mec	hanical Performance(机械特	性):			
5-1 Mating Force and Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min	Item	Description	Test Method & Condition	Requirement		
Un-mating Force(卡的插入力 Mate connector at a rate of 25±6mm per Unmating force 0.1 kgf min		(内容)	(测试方法与条件)	(需求)		
	5-1	Mating Force and	EIA-364-13	Mating force:1.0 kgf max		
和退出力) minute.		Un-mating Force(卡的插入力	Mate connector at a rate of 25±6mm per	Unmating force 0.1 kgf min		
		和退出力)	minute.			

Measure normal force at contact point of

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Singal: 0.02~0.06kgf

Switch: 0.025~0.1kgf

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Item	Description (内容)	Test Method & Condition (测试方法与条件)	Requirement (需求)		
5-3	Durability (耐久性)	EIA-364-09 Connectors shall be subjected to 10,000 cycles of Insertion and Withdrawal at a maximum rate of 500±50 cycles per hour.	No Physical Damage Contact Resistance: 100 mΩ max		
5-4	Vibration (振动测试)	EIA-364-28 Subject connector to follow condition: Frequency Range:10~55 Hz Duration: 2 hours for each direction.	No Physical Damage Discontinuity $<$ 1 microsecond Contact Resistance: 100 m Ω max.		
6. Enviro	onmental Performance	(环境特性):	1		
Item	Description (内容)	Test Method & Condition (测试方法与条件)	Requirement (需求)		
6-1	Humidity (耐湿性)	EIA-364-31 Cycle the connector between 40°C±2°C at 90~95% RH. Perform 96 hours.	No Physical Damage Contact Resistance: 100 mΩ max		
6-2	Salt Spray (盐雾试验)	EIA 364-26 Test Condition B Mated connector expose to salt spray for 48 hours Temperature: 35±2°C Salt density: 5 wt.%	No Physical Damage Contact Resistance: 100 mΩ ma		
6-3	Solder ability (着锡性)	EIA-364-52 Solder temperature: 245±5°C Immersion period: 5±0.5 sec.	No damage. Minimum: 95 % of immersed area.		
6-4	Resistance to Soldering Heat (附着耐热性)	EIA-364-56 Dip connector terminal tails in solder: Solder Duration:5±0.5 seconds; Solder temperature:260±5℃	Visual: No Damage or discoloration of connector materials.		
6-5	Thermal Shock (冷热冲击)	EIA-364-32 Test Condition I Subject mated connectors to 5 cycles between - $25^{\circ}\!$	No Physical Damage Contact Resistance: 100 m Ω ma.		
				Shoot : 2/3	

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7. Product Qualification And Requalification Test Sequence

Test or Examination	Test Group					
	Α	В	С	D	Е	F
		Т	est Se	quence		
Visual Examination	1, 14	1, 5	1, 5	1, 5	1, 3	1, 4
Contact Resistance	2, 11	2, 4	2, 4	2, 4		
Insulation Resistance	3, 12					
Dielectric Withstanding Voltage	4, 13					
mating Force	5, 9					
unmating Force	6, 8					
Normal force						2
Durability	7					
Vibration				3		
Humidity	10					
Solderability					2	
Resistance to Soldering Heat						3
Thermal Shock		3				
Salt Spray			3			

Note:

(a). Numbers indicate sequence in which tests are performed.

(b) discontinuities shall not take place in this test group , during tests

APPROVAL BY :JASON	CHECKED BY :DAWEI	SPEC BY: SMILE

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