

<b>Date Name</b>	Product Specification
Title:	SD 系列
Product NO:	SD 卡座

A

**Revision:** 

Page Amount: 1 of 5

Revisions Control					
Rev.	ECN Number	Changes compared to previous issue	Issue Date		
A		New issue	2014/10/22		

Product Specification Origination					
Quality Dep. Leader	Engineering Dep. Leader	Engineer			

Rev.A Page 1 of 5

#### 1.0 SCOPE

This specification covers performance test and quality requirements for the SD Card Connector

#### 1. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

Test Standards

EIA 364 Test methods for electrical connectors

### 2. REQUIREMENTS

**3.1** Design and construction

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

- 3.2 Materials
- 3.2.1 Insulator

High temperature Thermoplastic, UL94V-0

3.2.2 Contact

Phosphor Bronze

Finish: (a)Under plated: Ni plated overall (b)Contact Area: Au plated over Ni (c)Solder Tail: Sn plated over Ni

- 3.3 Ratings
- 3.3.1 Current Rating:0.5A
- 3.3.2 Voltage Rating:5V
- 3.3.3 Operating temperature:  $-25^{\circ}$ C to  $85^{\circ}$ C Storage temperature:  $-5^{\circ}$ C to  $45^{\circ}$ C
- 3.4 Environmental
- 3.4.1 Thermal Shock

Condition: EIA-364-32, subject mated connectors to 5 cycles between -25±3°C and 85±2°C

Rev A Page 2 of 5

for 30 minutes.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

### 3.4.2 Humidity-temperature Cycling

Condition: EIA-364-31, Test Condition B, subject mated connectors to 10 cycles between

 $-25\pm3$ °C and 85°C  $\pm20$  at 95% for 48 hour relative humidity.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

### 3.4.3 Heat Resistance

Condition: EIA-364-17, Mate dummy card and exposed to 85±2°C for 72 hours.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

### 3.4.4 Salt Spray

Condition: EIA-364-26, Concentration 5±1%. Spray time 12 hours. Ambient temperature 35±2 °C.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

### 3.5 Electrical

### 3.5.1 Dielectric Withstanding Voltage

Condition :EIA-364-20, 500V AC rms , 1 minute Test between adjacent contacts of unmated samples

Requirement: No physical damage.

### 3.5.2 Contact Resistance

Condition: EIA-364-23, except 100mA Maximum test current and 20mV maximum open

circuit voltage.

Requirement :  $100 \text{m} \Omega$  Max.

### 3.5.3 Insulation Resistance

Condition: EIA-364-23, test voltage 500VDC

Requirement :  $1000 \text{m} \Omega$  Min.

Rev A Page 3 of 5

### 3.6 Mechanical

### 3.6.1 Insertion Force and Extraction Force

Condition : EIA-364-13, at a rate of 25±3 mm/minute

Requirement: Total Insertion Force: 15N Max, Total pulling Force: 1N Min.

### 3.6.2 Vibration and High Frequency

Condition: EIA-364-28, Mechanical frequency range is 10-55-10Hz, total amplitude

1.5mm .Shall be traversed in 1 minute.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

### 3.4.3 Termination retention Force

Condition: Apply axial pull out force at the speed rate of 25±3 mm/minute.

100g/pin Min

Requirement: No physical damage.

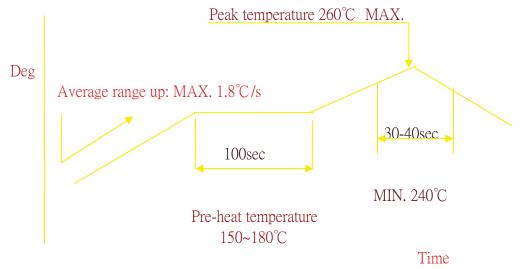
### 3.4.4Solderable

Condition:EIA-364-52. Dip solder tails into the molten solder (held at  $230 \pm 5^{\circ}$ C) from up to the tip of tails for  $3\pm0.5$ sec.Solder coverage 95% min.

Requirement: No physical damage.

### 3.4.5 Resistance to IR reflow

Condition: EIA-364-56



Temperature condition graph

Rev A Page 4 of 5

(Temperature on board pattern side)

Requirement: No damage after 2 times of reflow

# 3.4.6Drop

Condition: From 1.5m.

Requirement: No physical damage.

# 3.4.7 Durability Cycling

Condition :EIA-364-09,5000 cycles(office environment) mate and unmated connectors for

400~600 cycles per hour.

Requirement: 1) Examination of Appearance: No physical damage.

2) Contact Resistance :  $100 \text{m}\Omega$  Max

Rev A Page 5 of 5