

## 1. Scope

Mirco SD card connector series.

This specification covers the product performance, test methods and quality requirements of the Mirco SD Card Connector 8 Circuits series.

## 2. Applicable document

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. 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.

## 3. Ordering information

Refer to the drawing.

## 4. Connector dimensions

Refer to the drawing.

## 5. Material

Housing: Thermoplastic (UL 94V-0)

Color: Black

Terminal: Copper alloy

Plating: Gold in contact, tin on tail

Shell: Stainless steel

Plating: Nickel plated, gold on solder tail

## 6. Accommodated P.C.B layout

Refer to the drawing.

## 7. Rating

Operating voltage(Max.) 100V AC/DC

Current rating(Max.) 0.5A AC/DC

Temperature range-operating -40°C -- +85°C(Including terminal temperature rese)

## 8. Performance

Test item	Requirement	Test Condition	
Examination of product	Meets requirements of product drawing and specification.	Visual inspection No physical damage	
Electrical Performance			
Contact Resistance	Initial	50mΩ Max.	Subject mated contacts assembled in housing to closed circuit current of 10mA Max. at open circuit voltage 20mV (EIA-364-23)
	After test	100mΩ Max.	

Test item	Requirement	Test Condition
Insulation Resistance	1000 MΩ Min.	Test between adjacent contacts on unmated connectors at the potential of 500V DC. It was applied between all contacts. (EIA-364-21A)
Dielectric Strength	No evidence of flashover or breakdown.	The potential was applied between adjacent contacts of the connector for one minute. 500VAC R.M.S. for one minute. (EIA-364-20A)

#### Mechanical Performance

Durability	Appearance	No evidence of physical damage.	Mating and unmating samples for 1500 cycles at maximum rate of 600 cycles per hour. (EIA-364-09A)
	Contact resistance	50mΩ Max. (Finally).	
Vibration	Appearance	No evidence of physical damage.	The entire frequency range, from 10 to 55 Hz and return to 10Hz shall be traversed in approximately 1 minute. This motion shall be applied for 2 hours in each of 3 mutually perpendicular directions. (total of 6 hours) Amplitude: 1.50mm Max. (EIA-364-28A Cond. I)
	Open circuit less than 1 microsecond.		

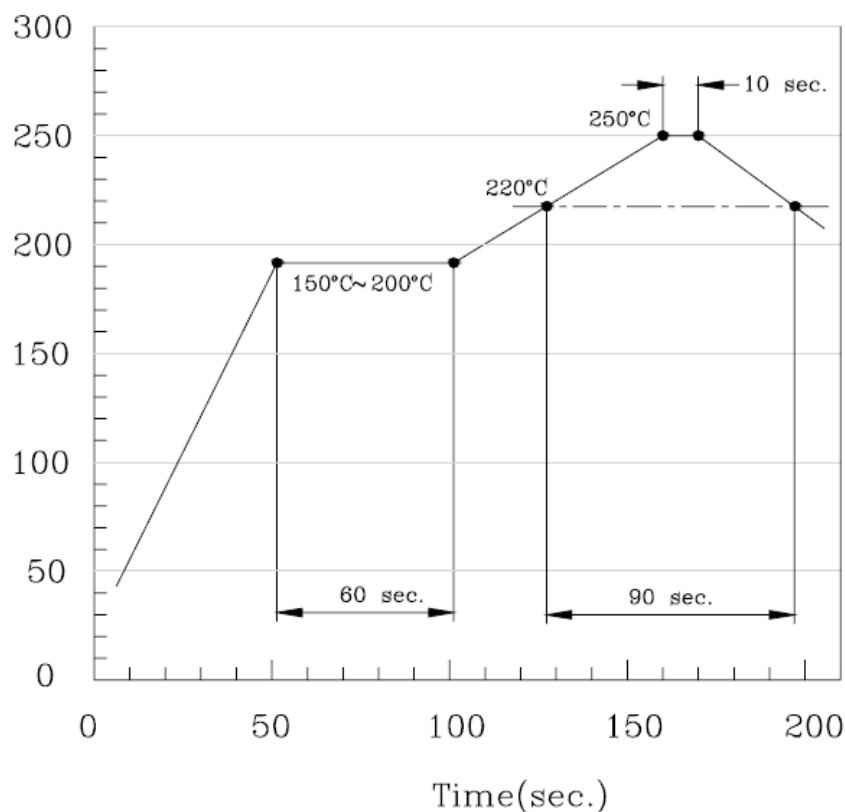
#### Environmental Performance and others

Humidity Test	Appearance	No evidence of physical damage.	The specimens shall be placed in a chamber and subjected to a relative humidity of 90% to 95% and a temperature of 40±2°C for 96 hours, then placed in ambient temperature for more than 1 hour. (EIA-RS-364-31A)
	Contact resistance	50mΩ Max. (Finally).	
	Insulation resistance	500MΩ Min. (Finally).	
Temperature Life (Heat)	Appearance	No evidence of physical damage.	The specimens shall be subjected to a temperature of +85°C for 96 hours, then placed in ambient temperature for more than 3 hours. (MIL-STD-1344A, Method 1005.1)
	Contact resistance	50mΩ Max. (Finally).	
	Insulation resistance	500MΩ Min. (Finally).	
Temperature Life (Cold)	Appearance	No evidence of physical damage.	The specimens shall be subjected to a temperature of -25°C for 96 hours, then placed in ambient temperature for more than 3 hours. (MIL-STD-1344A, Method 1005.1)
	Contact resistance	50mΩ Max. (Finally).	
	Insulation resistance	500MΩ Min. (Finally).	

Test item	Requirement	Test Condition
Salt Spray	No evidence of damage.	Subject mated and unmated connectors. should be tested according to the condition listed below : Temperature : $35 \pm 2^{\circ}\text{C}$ Humidity : 95 ~ 98% (R.H) PH Value : 6.5 ~ 7.2 Duration : 24 hours (EIA 364-26 Test Cond. A)
	The electrical performances should meet the spec. specified.	
Solderability	Continuous solder coating with a minimum 95% coverage.	Subject unmated connectors should be tested according to the condition listed below: Steam Aging Temperature : $90 \sim 96^{\circ}\text{C}$ Steam Aging Duration : 1 hours $\pm$ 5min. Soldering Temperature : $235^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Soldering Time : 4 ~ 5 seconds Flux : unacted (EIA 364-52 Category 2)
Resistance to soldering heat	No evidence of damage.	The connector shall be tested resistance, Refer to paragraph 9.

#### 9. Reference infrared reflow condition

Temperature  
( $^{\circ}\text{C}$ )



## 10. Test Sequence

Test Item	Test Group												
	A	B	C	D	E	F	G	H					
	Test Sequence												
Examination of Product	1,3,5	1,5	1,3	1,3	1,7	1,7	1,7	1,3					
Contact Resistance		2,4	2,5		2,5	2,5	2,5						
Insulation Resistance	2		3,6		3,6	3,6	3,6						
Dielectric Strength													
Durability	4	3											
Vibration													
Humidity Test			4										
TemperatureLife ( Heat )						4							
TemperatureLife ( Cold )					4								
Salt Spray							4						
Solderability				2									
Resistance to soldering heat								2					
Number of Test Samples(minimum)	5	5	5	5	5	5	5	5					

Note:

- Samples shall be prepare in accordance with applicable manufacture's instructions and shall be selected at random from current production, Each test groups shall consist of a minimum of five connectors.
- The numbers in the table indicate sequence in which tests are performed.