

1. Scope

Nano Sim card connector series.
 This Product Specification covers the Nano Sim Card Series connector.

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 plated
- 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.) 50V 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	50mΩ Max.	Mate connectors with dry circuit (20mV,100mA Max.) at minimum deflection. (EIA-364-23B)

Test item	Requirement	Test Condition
Insulation Resistance	100 MΩ Min.	When applied DC 100V between adjacent terminal or ground. (EIA-364-21C)
Dielectric Strength	No evidence of flashover or breakdown.	When applied AC 100V 1 minute between adjacent terminal. (EIA-364-23B)

Mechanical Performance

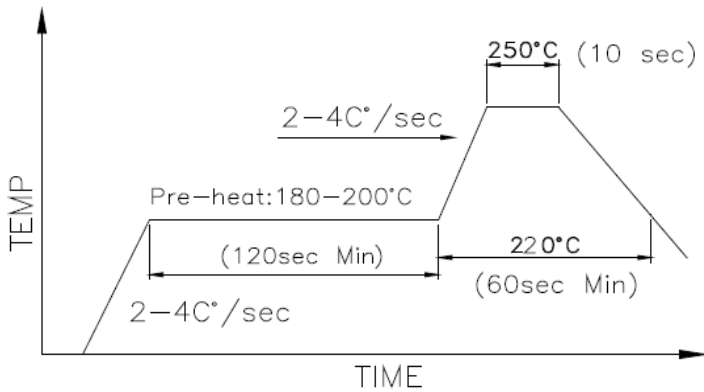
Durability	Appearance	No mechanical damage	Operation Speed: 200 cycles/H. Durability Cycles: 5000 Cycles (EIA-364-09C)
	Contact resistance	100mΩ Max.	
Normal force	0.2N min /circuit		Measures contact pressure at terminal contact point from housing surface 0.1mm.

Environmental Performance and others

Temperature Rise	30°C Max		Mated connectors: measure the temperature rise at the rated current 0.5A (EIA-364-70A)
Humidity Life	Appearance	No Damage	Solder connectors on PCB, expose to 40±2°C with 90~95% RH for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 of 2 hours, after which the specified measurements shall be performed.
	Contact resistance	100mΩ Max.	
	Insulation resistance	100MΩ Min.	
Temperature Life (Heat Aging)	Appearance	No evidence of physical damage.	Mated Connector 85°C , 96 hours Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours. (EIA-364-17B)
	Contact resistance	100mΩ Max. (Finally).	
Cold Resistance	Appearance	No evidence of physical damage.	Solder connectors on PCB ,expose to -40±3°C for 48 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.
	Contact resistance	100mΩ Max.	

Test item	Requirement		Test Condition
Thermal Shock	Appearance	No Damage	Samples shall be placed in the test chamber with the test condition for 5 cycles: 1>.-55°C ~ 30 minutes 2>.+25°C ~ 5 minutes 3>.+85°C ~ 30 minutes 4>.+25°C ~ 5 minutes (EIA-364-32A)
	Contact resistance	100mΩ Max.	
	Insulation resistance	100MΩ Min.	
Salt Spray	Appearance	No detrimental corrosion allowed in contact area.	Subject mated connectors to 35+/-2 °C and 5+/-1% salt condition for 24hours. After test, rinse the sample with water and recondition the room temperature for 2 hours. (EIA-364-26B)
	Contact resistance	100mΩ Max.	
Solderability	No evidence of physical damage, Wet solder coverage: 95% min.		The surfaces to be tested shall be immersed in flux for a minimum of 5±0.5 second ; the temperature of the solder bath shall be maintained as measured below the surface on the solder at 245°C ± 5°C (EIA-364-52)
Resistance to soldering heat	No evidence of physical damage		Test condition for reflow soldering. Refer to paragraph 9. (MIL-STD-202 F, Method 210 A)

9. Reference infrared reflow condition



10. Test Sequence

Test Item	Test Group												
	A	B	C	D	E	F	G	H	I	J	K		
	Test Sequence												
Examination of Product	1,5	1	1,5	1	1,5	1,7	1,7	1,5	1,5	1,3	1,3		
Contact Resistance	2		2,4		2,4	2,6	2,6	2,4	2,4				
Insulation Resistance	3					3,5	3,5						
Dielectric Strength	4												
Temperature Rise		2											
Durability			3										
Normal force				2									
Cold Resistance					3								
Thermal Shock						4							
Humidity Life							4						
Temperature Life(Heat Aging)								3					
Salt Spray									3				
Solderability										2			
Resistance to soldering heat											2		
Number of Test Samples(minimum)	5	5	5	5	5	5	5	5	5	5	5		