

1. Scope

This specification covers the micro USB Female SMT type connector series.

2. Applicable documents

The following documents form a part of this specification to the extent specified herewith. In the event of conflict between the requirements of the specification and the product drawing, the product drawing shall take precedence.
In the event of conflict between the requirements of the 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: LCP (UL 94V-0)

Color: Refer to the drawing.

Terminal: Copper alloy

Plating: Gold plated

Shell: SUS 304

Plating: Tin plated

6. Accommodated P.C.B layout

Refer to the drawing.

7. Rating

Operating voltage(Max.) 30V DC/AC

Current rating(Max.) 1.0A

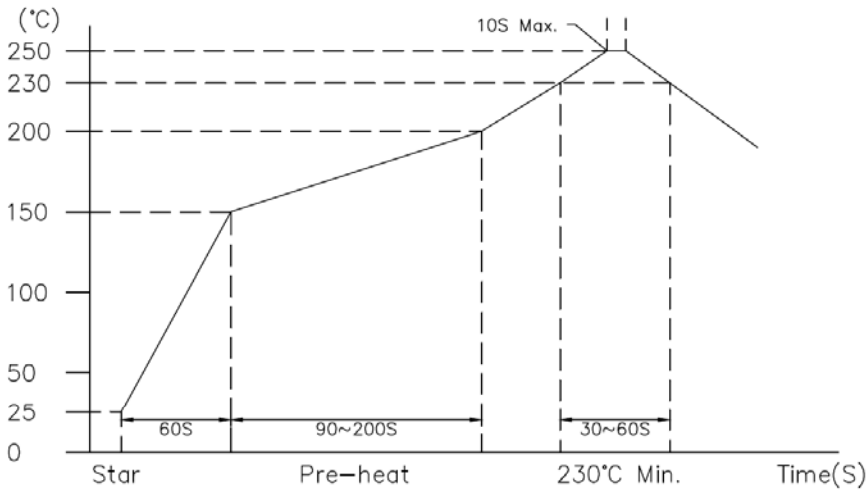
Temperature range-operating -25°C -- +85°C

8. Performance

Test item	Standards	Requirement
Electrical Performance		
Contact Resistance	30 mΩ Max.	Mate applicable micro USB plug, measure by dry circuit, 20mV Max., 100mA. (EIA-364-23)
Insulation Resistance	100 MΩ Min.	Mate applicable micro USB plug, apply 100V DC for 1 minute between adjacent terminal or ground. (EIA-364-21)
Dielectric Strength	No breakdown	Mate applicable micro USB plug; apply 100V AC for 1 minute between adjacent terminal or ground. (EIA 364-20)

Test item	Standards		Requirement
Mechanical Performance			
Insertion Force	3.57kgf Max.		Insert the standard gauge at the speed rate of 12.5mm per minute, Mate applicable micro USB plug. (EIA-364-13)
Withdrawal Force	0.82kgf Min.		Withdraw the standard gauge at the speed rate of 12.5mm per minute, Mate applicable micro USB plug. (EIA-364-13)
Durability	Contact Resistance	50 mΩ Max.	MICRO USB Receptacle Mate applicable micro USB plug up to 5000 cycles repeatedly. (EIA-364-09)
Environmental Performance and others			
Heat Resistance	Appearance	No damage	85±5°C, 96 hours.
	Contact Resistance	50 mΩ Max.	
Cold Resistance	Appearance	No damage	-25±5°C, 96 hours.
	Contact Resistance	50 mΩ Max.	
Humidity	Appearance	No damage	Temperature : 40±2°C. Relative Humidity : 90~95%. Duration : 96 hours. (EIA 364-31)
	Contact Resistance	50 mΩ Max.	
	Dielectric strength	No Breakdown at 100V AC /minute	
	Insulation Resistance	1000 MΩ	
Temperature cycling	Appearance	No Damage	Mated connector shall be set to temperature cycling for 5 cycles of which 1 cycle consists of: 1>. +25°C ~ 3 minutes 2>.-25°C ~ 30 minutes 3>. +25°C ~ 3 minutes 4>. +85°C ~ 30 minutes
	Contact Resistance	50mΩ Max.	
Salt Spray	Appearance	No damage	48±2hours exposure to a salt spray from the 5±1%, solution at 35±2°C, After test, rinse the sample with water and recondition the room temperature for 1 hour. (EIA 364-26)
	Contact Resistance	50 mΩ Max.	

Test item	Standards	Requirement
Solderability	The surface of the portion to be soldered shall at least 95% covered with new solder coating.	Solder Temperature: 245±3°C, Duration: 5±0.5 seconds. (EIA 364-52)
Resistance To Solder Heat	No mechanical defect on housing or other parts.	Temperature: 250°C Max., 10±0.5 seconds. (Lead-Free)



Reference infrared reflow condition (Lead-Free)

9. Test sequences identification

No.	Test or Examination	Test Group					
		A	B	C	D	E	F
1	Examination of Product	1,4	1,8	1,7	1,6	1,3	1,3
2	Dielectric Strength	3		6			
3	Contact Resistance		2,5,7	4	3,5		
4	Insulation Resistance	2		5			
5	Insertion Force	5					
6	Withdrawal Force		3				
7	Contact Retention Force	6					
8	Durability		4				
9	Heat Resistance			2			
10	Cold Resistance		6				
11	Humidity			3			
12	Temperature cycling				2		
13	Solder ability					2	
14	Resistance to Soldering Heat						2
15	Salt Spray				4		