

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: Black

Terminal: Phosphor bronze

Plating: Gold plated

Shell: Copper alloy

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 -30°C -- +80°C

8. Performance

Test item	Standards	Requirement
Electrical Performance		
Contact Resistance	50 mΩ Max.	Mate applicable micro USB plug, measure by dry circuit, 20mV Max., 100mA. (EIA 364-23A)
Insulation Resistance	100 MΩ Min.	Mate applicable micro USB plug, apply 100V DC for 1 minute between adjacent terminal or ground. (EIA 364-21A)
Dielectric Strength	No breakdown	Mate applicable micro USB plug; apply 100V AC for 1 minute between adjacent terminal or ground. (EIA 364-20A)

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 364-13A)
Withdrawal Force	1.00kgf Min.		Withdraw the standard gauge at the speed rate of 12.5mm per minute, Mate applicable micro USB plug. (EIA 364-13A)
Terminal Retention Force	0.30kgf Min.		Apply axial pull out force on the terminal assembled in the housing. Operation speed:12.5mm/minute
Durability	Appearance	No damage	MICRO USB Receptacle Mate applicable micro USB plug up to 3000 cycles repeatedly. (EIA 364-09A)
	Insertion Force	3.57kgf Max.	
	Withdrawal Force	0.81~2.05kgf	
Vibration	Appearance	No Damage	Amplitude: 1.5mm P.P Sweep time: 10-55-10Hz/minute Duration: 2 hours in each X、Y、Z axlals. (EIA 364-28A)
	Contact Resistance	50mΩ Max.	
	Discontinuity	1μ sec Max.	
Environmental Performance and others			
Heat resistance	Appearance	No Damage	Mated connector shall be placed in an oven for 96±4 hours at +80±2°C. (MIL STD-1344A)
	Contact Resistance	50mΩ Max.	
	Insulation Resistance	100 MΩ	
Cold resistance	Appearance	No Damage	Mated connector shall be placed in a temperature chamber for 96±4 hours at -30±2°C (MIL STD-1344A)
	Contact Resistance	50mΩ Max.	
	Insulation Resistance	100 MΩ	
Humidity	Appearance	No Damage	Mated connector shall be placed in a humidity chamber on the following conditions. Temperature: 40±2°C Relative humidity: 90~95% Duration : 120 Hours (EIA 364-31A)
	Contact Resistance	50mΩ Max.	
	Insulation Resistance	100 MΩ	

Test item	Standards		Requirement
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>.-30°C ~ 30 minutes 3>.+25°C ~ 3 minutes 4>.+80°C ~ 30 minutes
	Contact Resistance	50mΩ Max.	
Salt Spray	Appearance	No damage	12±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 364-26A)
	Contact Resistance	50 mΩ Max.	
Solderability	The surface of the portion to be soldered shall at least 95% covered with new solder coating.		Solder Temperature: 235±5°C, Duration: 5±0.5 seconds. (MIL STD-202F)
Resistance To Solder Heat	No mechanical defect on housing or other parts.		Temperature: 250°C Max., 10±0.5 seconds. (Lead-Free) (EIA 364-56)

9. Reference infrared reflow condition

