1. **Scope**
   USB 2.0 series
   This specification covers the USB connector smt or solder type.

2. **Ordering information**
   Refer to the drawing.

3. **Connector dimensions**
   Refer to the drawing.

4. **Material**
   Housing: Heat resistant polymer (UL 94V-0)
   Color :Refer to the drawing
   Terminal: Copper alloy
   Plating:Refer to the drawing.

5. **Accommodated P.C.B layout**
   Refer to the drawing.

6. **Rating**

Operating voltage(Max.)	30V DC
Current rating(Max.)	1.5A Max. (Each Circuit)
Temperature range-operating	-25°C -- +85°C(Including terminal temperature rise)

7. **Performance**

Electrical Performance

Contact Resistance	30mΩ Max	Mate connectors, Measure by dry circuit, 20mV Max, 100mA (EIA 364-23)
Insulation Resistance	1000MΩ Min	Unmated connectors, apply 500V DC between adjacent terminal or ground. (EIA-364-21)
Dielectric Strength	No Breakdown. Current leakage: 1 mA Max.	Unmated connectors, apply 500V AC for 1 minute between adjacent terminal or ground. (EIA 364-21)

Mechanical Performance

Terminal Retention Force	0.45kgf Min.	Apply axial pull out force on the terminal assembled in the housing. Operation speed:12.5mm/minute
Insertion Force	3.57kgf Max.	Measure mating force necessary to mate connector. Operation speed:12.5mm/minute (EIA-364-13)
Withdrawal Force	1.02kgf Min.	Measure unmating force necessary to mate connector. Operation speed:12.5mm/minute (EIA-364-13)

Environmental Performance and others

Durability	Mated and unmated connectors up to 1500 cycles at a maximum rate of 200 cycles per hour. (EIA-364-09)	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ

Vibration	Amplitude:1.52mm. Sweep time:50～2000～50Hz Duration:15 minutes in each(total of 45 minutes) X,Y,Z azes. Electrical load:DC 100mA (EIA-364-28)	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
		Discontinuity	1μsec Max
Shock	Mate connentors together and perform the test as follows. 10 cycle of: A)-40℃ for 30 minutes; B)+85℃ for 30 minutes (EIA-364-32)	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
Heat Resistance	The connector is exposed to 85±2℃ atmosphere for 48 hours. After testing it shall be left alone for 1 to 2 hours in room ambient.	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
Cold Resistance	The connector is exposed to -40±2℃ atmosphere for 96 hours. After testing it shall be left alone for 1 to 2 hours in room ambient.	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
Humidity	Temperature:40±2℃, Relative Humidity:90～95% Duration:7 cycles (168 hours) Upon completion of the test,specimens shall be conditioned at ambient room conditions for 1～2 hours (EIA-364-31)	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
		Dielectric strength	No Breakdown
Salt Spray	Salt concentration:5%; Temperature:35±1℃; Testing time:24 hours ,After salt is removed by running water and a drop is removed,it is measured. (EIA-364-26A)	Appearance	No Damage
		Contact Resistance	Change from initial: 30mΩ
Solderability	Soldering time:3±0.5second Solder Temperature:260±5℃	Solder Wetting	95% min.of soder area

Resistance to Soldering Heat	Soldering Iron method Using the soldering iron, and the cored solder wire. It is applied to termination for 3+1/-0s at 350±5℃.	Appearance	No Damage
	Wave Soldering method(Solder bath) Test connector on PCB. Soak flux: 5seconds Pre-heat: 100～130℃(PCB copper side);60seconds Solder bath: 260±5℃;5seconds After testing it shall be left alone for 1 hour in room ambient.	Appearance	No Damage

8. **Infrared reflow condition**