USB A TYPE RECEPTACLE SINGLE,RIGHT ANGLE, THROUGH HOLE

1.0 SCOPE

This Product Specification covers the USB connector series with terminal tin plating and cover selective plating for IR reflow process.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

USB A TYPE RECEPTACLE SINGLE,RIGHT ANGLE,THROUGH HOLE W/O FLANGE:
67643-2910 ; 67643-3910 ; 67643-2911; 67643-3911;

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate sales drawings for information on dimensions, materials, plating and markings.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

MIL-STD-1344A
EIA-STD- 202
EIA-364

4.0 RATINGS OF CONNECTOR

1. Rate Voltage: 30 V DC
   Rate Current: 1.5 A DC

2. Operating temperature: -40°C to +85°C
   Storage temperature: -40°C to +85°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Contact Resistance	Mate connectors: apply a maximum voltage of **20** mV and a current of **100** mA.	**30** milliohms MAXIMUM
	Insulation Resistance	Unmated connector, mounted to a PCB: apply a voltage of **500** VDC between adjacent terminals and between terminals to ground.	**1000** Megohms MINIMUM
	Dielectric Withstanding Voltage	**750** VAC rms (**1**mA cutoff current) for **60** seconds duration between adjacent terminals and terminals.	**No Breakdown**
	Capacitance	Test between adjacent contacts to 1 Megahertz max per EIA-364.	**2** picofarad MAXIMUM
	Current Temperature Rating	Mate connector and measure the temperature rise at the rated current **(1.5Amps)**.	**30**℃ rise MAXIMUM from initial

5.2 MECHANICAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Connector Mate and Unmate Force	Mate connector at a rate of **25 ± 6** mm (**1 ± ¼** inch) per minute.	**3.57Kgf (35** N) MAXIMUM mate force **1.02 Kgf (10** N) MINMUM unmate force
	Terminal Retention	Apply a pull out force in the axial direction of the contact per Mil-STD-1344A method 2007.1	**0.8** Kgf minimum
	Vibration	Mated connector and subject to the following vibration condition, for a period of 15 minutes in each 3 mutually perpendicular axes. Per EIA-364-28,Test condition V,Test letter A.	Contact Resistance **30** milliohms MAXIMUM Discontinuity ≦ **1**usec
	Mechanical Shock	Subject mated connector to 30 G half sine in 11 msec according to EIA-364-27.	Contact Resistance **30** milliohms MAXIMUM Discontinuity ≦ **1**usec

	Durability	Mate this connector with it's mating part of 1500 cycles. Other conditions follow per EIA-364-09.	Contact Resistance **30** milliohms MAXIMUM

5.3 ENVIRONMENTAL REQUIREMENTS

	DESCRIPTION	TEST CONDITION	REQUIREMENT
	Steady State Humidity	Mate connectors; Temperature: **40±2**℃ Relative humidity: **90-95**% Duration time: **168** hours	Contact Resistance **30** milliohms MAXIMUM
	Solderability	Dip solder tails into the molten solder (held at **245 ± 5**℃) up to 1.0mm from the bottom of the housing for **3 ± 0.5** seconds	Solderable area shall have minimum of **95%** solder coverage
	Temperature Life (Thermal Aging)	Subject mated connector to ambient temperature 125°C for 250 hours. Per Mil-STD-1344A method 1005.1 condition B	Contact Resistance **30** milliohms MAXIMUM
	Thermal Shock	Subject mated connector to 10 cycles of exposure at -55°C and 85°C per EIA-364-32.	Contact Resistance **30** milliohms MAXIMUM
	Reflow	Place connector in IR reflow , Peak temperature:**260 ± 5**°C for **5±1** seconds	Appearance : No damage

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.
See appropriate sales drawings.

7.0 OTHER INFORMATION

N/A