

## PRODUCT SPECIFICATION

# 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; 67643-3911;

### 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

 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

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REVISION DESCRIPTION				USB A TYPE RECEPTACLE SINGLE RIGHT ANGLE THROUGH HOLE				
CHANGE NO.				0				
REVISED BY	FYANG05	DATE	2017/10/20	DOC TYPE	DOC TYPE DOC TYPE DESCRIPTION [			SERIES
REV APPR BY	GGA	DATE	2021/03/16	PS		PRODUCT SPECIFICATION WORD	001	67643
INITIAL RELEASE			CUSTO	MER	DOCUMENT NUMBER	REVISION	SHEET	
INITIAL DRWN	JCHEN12	DATE	2005/05/23	GENERAL MARKET		PS-67643-002	<b>C</b> 1	1 OF 4
INITIAL APPR	JALEXANDER	DATE	2005/05/25			F3-07043-002	5	1 OF 4



# **PRODUCT SPECIFICATION**

## 5.0 PERFORMANCE

### **5.1 ELECTRICAL REQUIREMENTS**

DESCRIPTION	TEST CONDITION	REQUIREMENT
Contact Resistance	Mate connectors: apply a maximum voltage of <b>20</b> mV and a current of <b>100</b> mA.	30 milliohms MAXIMUM
Insulation Resistance	Unmated connector, mounted to a PCB: apply a voltage of <b>500</b> VDC between adjacent terminals and between terminals to ground.	1000 Megohms MINIMUM
Dielectric Withstanding Voltage	<b>750</b> VAC rms (1mA cutoff current) for <b>60</b> 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).	<b>30</b> ℃ rise MAXIMUM from initial

### **5.2 MECHANICAL REQUIREMENTS**

DESCRIPTION	TEST CONDITION	REQUIREMENT
Connector Mate and Unmate Force	Mate connector at a rate of $25 \pm 6$ mm $(1 \pm \frac{1}{4}$ 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	<b>0.8</b> 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 <b>30</b> milliohms MAXIMUM  Discontinuity ≤ <b>1</b> usec
Mechanical Shock	Subject mated connector to 30 G half sine in 11 msec according to EIA-364-27.	Contact Resistance <b>30</b> milliohms MAXIMUM  Discontinuity ≤ <b>1</b> usec

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CHANGE NO.	655037			O	.011 MOIII / MO11						
REVISED BY	FYANG05	DATE	2017/10/20	DOC TYPE		DOC TYPE DESCRIPTION	DOC PART	SERIES			
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	Durability	Mate this connector with it's mating part of 1500 cycles. Other conditions follow per EIA-364-09.	Contact Resistance <b>30</b> milliohms MAXIMUM
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# **5.3 ENVIRONMENTAL REQUIREMENTS**

DESCRIPTION	TEST CONDITION	REQUIREMENT
Steady State Humidity	Mate connectors; Temperature: 40±2°C Relative humidity: 90-95% Duration time: 168 hours	Contact Resistance <b>30</b> milliohms MAXIMUM
Solderability	Dip solder tails into the molten solder (held at $245 \pm 5^{\circ}$ C) up to 1.0mm from the bottom of the housing for $3 \pm 0.5$ seconds	Solderable area shall have minimum of <b>95</b> % 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 <b>30</b> milliohms MAXIMUM
Thermal Shock	Subject mated connector to 10 cycles of exposure at -55°C and 85°C per EIA-364-32.	Contact Resistance <b>30</b> milliohms MAXIMUM
Reflow	Place connector in IR reflow , Peak temperature:260 ± 5°C for 5±1 seconds	Appearance : No damage

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#### 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

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