

# **Product Specification**

#### **USB Connectors**

1) Rating: DC 30V 0.3A

2) Operating Temperature Range:  $-10^{\circ}$ C  $\sim +60^{\circ}$ C

### 3) Electrical Performance:

	Test Conditions	Performance	
Contact Resistance	Measured at small current (10mA	50m $Ω$ Max.	
	1000Hz or less)		
	Apply a voltage of 500V DC shall be applied for 1 minute after		
	which measurement taken:		
	(1) Between terminals not to		
Insulation Resistance	be contact	100MΩ Min.	
	(2) Between body and	TOOMS WITH.	
	terminal		
	(3) Between terminals not to		
	be contact when plug is		
	inserted		
Dielectric Strength	AC500V rms (50-60Hz) for 1		
	minute trip current: 0.5mA		
	(1) Between terminals not to	Without damage to parts arcing or breakdown	
	be contact.		
	(2) Between body and		
	terminal		
	(3) Between terminals not to		
	be contact when plug is		
	inserted.		

## 4) Mechanical Performance:

	Test Conditions	Performance	
Insertion Force	Measurement shall be made after 3		
msertion Porce	times of insertion and extraction with	700±200 gf	
	gauge plug		
	Measurement shall be made after 3		
Extraction Force	times of insertion and extraction with	500±200 gf	
	gauge plug		
	A static load of 300gf shall be applied	Electrical characteristics shall be	
Terminal Strength	to the terminal for 15 seconds in any	satisfied without damage or	
	direction	excessive looseness of terminals	
Life Test	Endurance without load:	(1) Contact resistance: $100 \text{m}\Omega$	
	Jack shall be subjected to 5,000	Max.	
	cycles at a rate of 15 to 18 cycles per	(2) Insulation Resistance: 50MΩ Min.	
	minute without loading.	(3) Withstand Voltage: AC 500V	



	(4)	for 1 minute. Without damage to parts
		arcing or breakdown.

#### 5) Environmental Characteristics:

	Test Conditions	Performance
Solderability Test	The top of terminals shall be	The Area of soldering should be
	dipped 2mm in the solder bath of	over 75%
	255±5°C for 3±0.5 seconds	
	Solder bath method: Solder	
	temperature 260±5°C. Immersion	
	time within 10sec. Immersion	Without deformation of case or
	depth up to the surface of the	excessive looseness of terminals
Resistance to Solder Heat Test	board 1.6mm. Dimensions of	electrical characteristics shall be
	component holes in the printed	satisfied.
	wiring board shall be accordance	satisfied.
	with those specified in this	
	specification	
	The jack shall be stored at a	
	temperature of -25± 3°C for 48	
	hours, then the switch shall be	
Cold Test	maintained at standard	
	atmospheric conditions for 1 hour	
	after which measurement shall be	
	made	There shall be no deformation or
	The jack shall be stored at a	cracks in the molded part.
	temperature of 70±2°C for 48	
	hours, then the jack shall be	
Heat Test	maintained at standard	
	atmospheric conditions for 1 hour	
	after which measurement shall be	
	made.	
	The jack shall be stored at a	
	temperature of 40±2°C and a	
Humidity Test	humidity of 90% to 98% for 48	
	hours, then the jack shall be	There shall be no deformation or
	maintained at standard	cracks in molded part.
	atmospheric conditions for 1 hour	
	after which measurement shall be	
	made.	
Т	est Condition (Unless otherwise specif	ied)
	Temperature: 5°C - 35°C	
	Humidity: 45% - 85% R.H.	
	Pressure: 86 – 106kPa	