

# USB A 3.0 plug Horizontal SMT or molding style

### Materials

1. Shell, steel, nickel plated
2. Pins, brass, 5 μ" gold and tin plating
3. Insulator, PA9T, blue

### Electrical

Rated voltage: 30 Vdc  
 Rated current: 3 A  
 Dielectric strength: 500 Vac for 1 min. without damage  
 Insulation resistance: 500 MΩ after 500 Vdc for 1 min  
 Contact resistance: 50 mΩ or less

### Mechanical

Insertion force: 3.5 kgf maximum  
 Withdrawal force: 1.0 kgf minimum  
 Durability: 1500 cycles unloaded, while maintaining:  
 Contact resistance: 100 mΩ  
 Insulation resistance: 100 MΩ insulation  
 Dielectric strength: 100 Vac for 1 min without damage  
 Terminal strength: 0.3 kgf in any direction for 15 seconds without damage or looseness

### Soldering

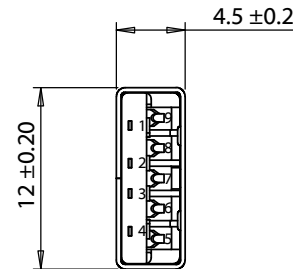
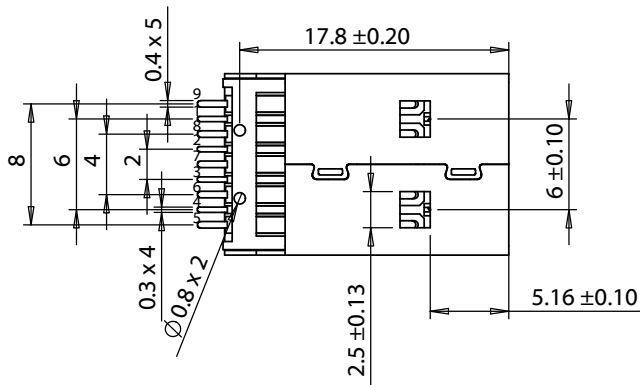
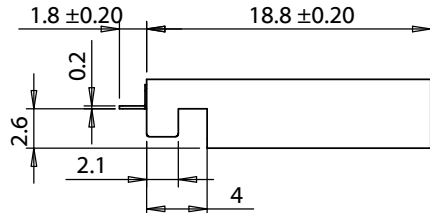
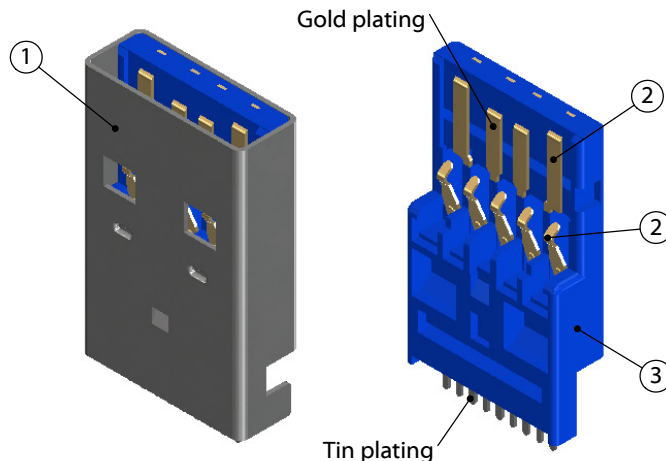
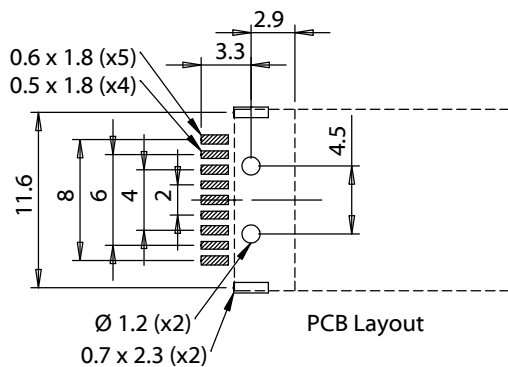
Solderability: 75% minimum coverage when terminals dipped 2 mm in 255 ±5 °C solder bath for 3 ±0.5 seconds  
 Solder bath durability: no deformation when immersed in 260 ±5 °C up to surface of the board for 10 seconds or less  
 Solder iron durability: no deformation when exposed to 350 ±10 °C for 3 ±0.5 seconds

### Environmental

Cold test: -40 ±3 °C for 48 hours without deformation  
 Heat test: 85 ±2 °C for 48 hours without deformation  
 Humidity test: 40 ±2 °C and humidity between 90 and 98 % for 48 hours without deformation

### Operating range

-40 ~ 85 °C



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	12/14/2015	Initial release	Verified:	RoHS and REACH compliant	
A1	06/18/2018	Corrected pinout numbering	Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	Size: Part number: A 50-00469
A2	07/27/2018	Corrected operating temp range		Description:	
A3	9/4/2018	Changed insulator material		Connector, USB A 3.0 plug, horizontal SMT or molding style, nickel shell, blue insulator	Sheet 1 of 1