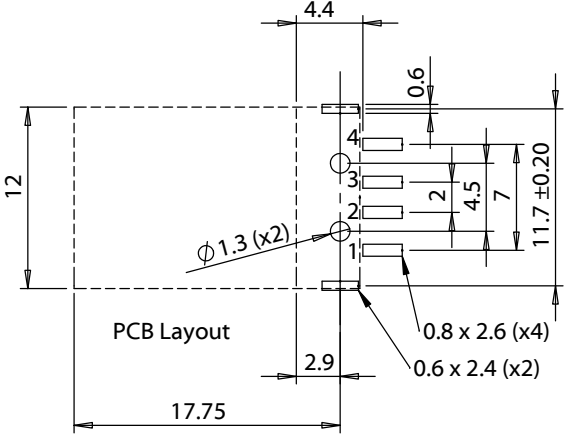
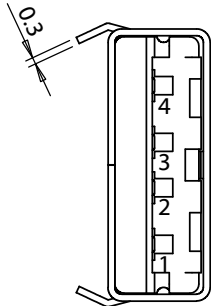
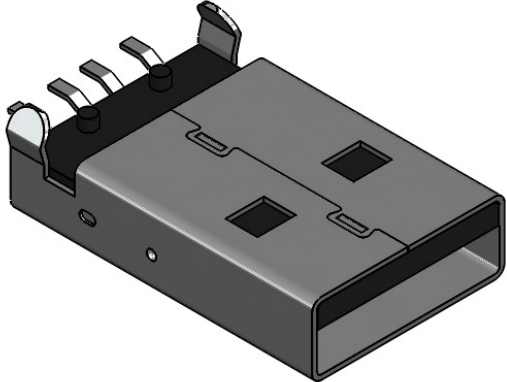
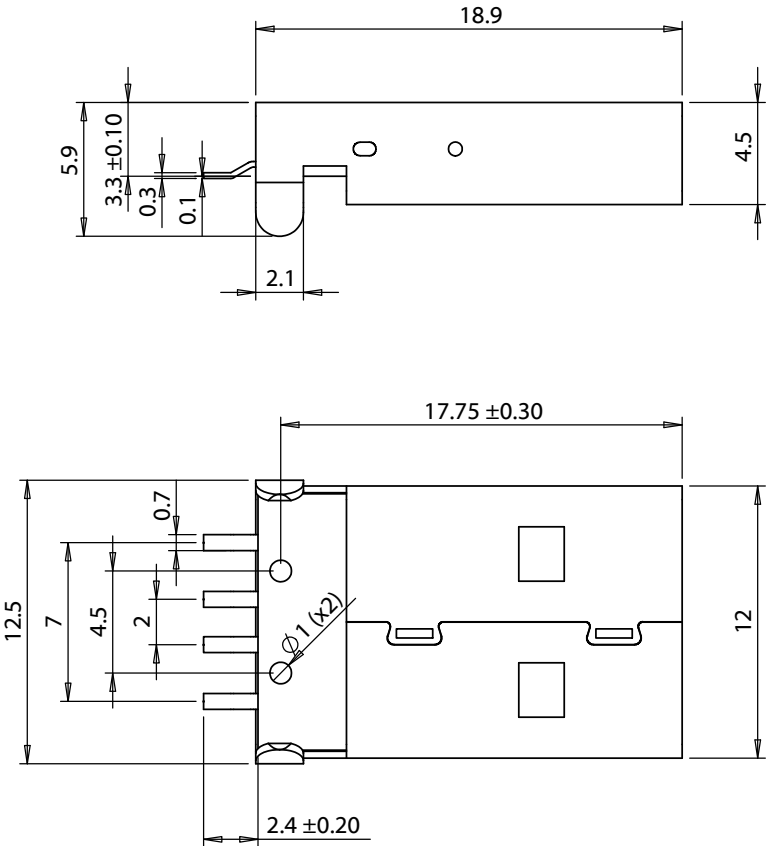


# USB A plug 90° SMT mount



Revision:	Date:	Description:	Prepared:	Notes:	<h2>TENSILITY</h2> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	09/28/2015	Initial release	Verified:		
A1	07/27/2018	Corrected operating temp range	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: A
A2	9/4/2018	Changed insulator material		Description: Connector, USB A plug, PCB mount, 180°, nickel shell, board lock, black insulator, tray	Part number: 54-00011
				Scale: 2:1	Sheet 1 of 2

To see a custom version of this cable assembly, call Tensility at 541-323-3228 or email engineering@tensility.com

### Materials

1. Shell, steel, nickel plated
2. Pins, brass, 5  $\mu$ " gold and tin plating
3. Insulator, PA9T, black

### Electrical

Rated voltage: 30 Vdc  
 Rated current: 3 A  
 Dielectric strength: 500 Vac for 1 min without damage  
 Insulation resistance: 500 M $\Omega$  after 500 Vdc for 1 min  
 Contact resistance: 50 m $\Omega$  or less

### Mechanical

Insertion force: 3.5 kgf maximum  
 Withdrawal force: 1.0 kgf minimum  
 Durability: 1500 cycles unloaded, while maintaining:  
 Contact resistance: 100 m $\Omega$   
 Insulation resistance: 100 M $\Omega$   
 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  $\pm$ 5  $^{\circ}$ C solder bath for 3  $\pm$ 0.5 seconds  
 Solder bath durability: no deformation when immersed in 260  $\pm$ 5  $^{\circ}$ C up to surface of the board for 5 seconds or less  
 Solder iron durability: no deformation when exposed to 350  $\pm$ 10  $^{\circ}$ C for 3  $\pm$ 0.5 seconds

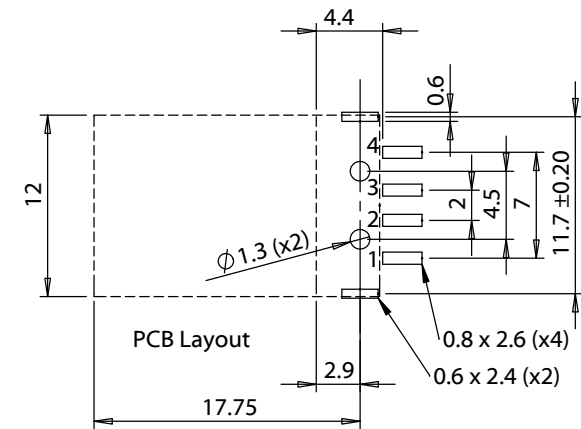
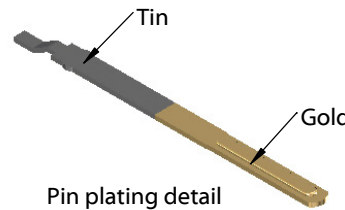
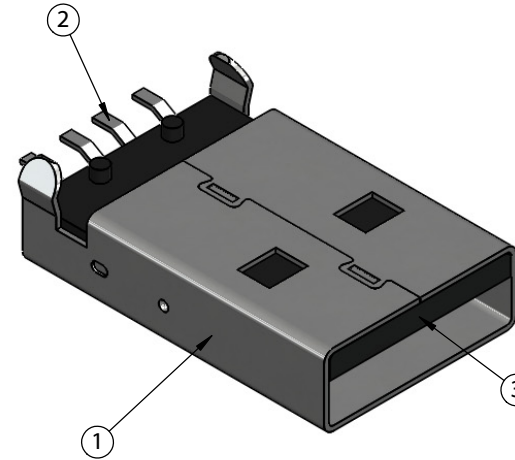
### Environmental

Cold test: -40  $\pm$ 3  $^{\circ}$ C for 48 hours without deformation  
 Heat test: 85  $\pm$ 2  $^{\circ}$ C for 48 hours without deformation  
 Humidity test: 40  $\pm$ 2  $^{\circ}$ C and humidity between 90 and 98 % for 48 hours without deformation

### Operating range

-40 ~ 85  $^{\circ}$ C

# USB A plug 90 $^{\circ}$ SMT mount



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118          fax 1.541.323.4202 web tensility.com</p>
A	09/28/2015	Initial release		RoHS and REACH compliant	
A1	07/27/2018	Corrected operating temp range	Verified:	Function test: no open, no short circuit, no intermittent	
A2	9/4/2018	Changed insulator material	Dimensions are in millimeters. Tolerances: X: $\pm$ 0.5 mm X.X: $\pm$ 0.3 mm X.XX: $\pm$ 0.05 mm	Description: Connector, USB A plug, PCB mount, 180 $^{\circ}$ , nickel shell, board lock, black insulator, tray	Size: Part number: A 54-00011
					Scale: 2:1