



Voltage: 48 V  
Current: 5.0 A

### Operating Temperature Range

-40 to 85 °C, relative humidity of 85% or less

## Materials

- ① Insulator: Nylon 46, black
- ② Spring contact: phosphor bronze, silver plated
- ③ Terminal: brass, silver plated
- ④ Spring contact: phosphor bronze, silver plated
- ⑤ center pin: copper alloy, silver plated

## Electrical Requirements

Dielectric strength: 1 min @ 250 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc minimum  
Contact resistance: 50 mΩ or maximum

## Mechanical Requirements

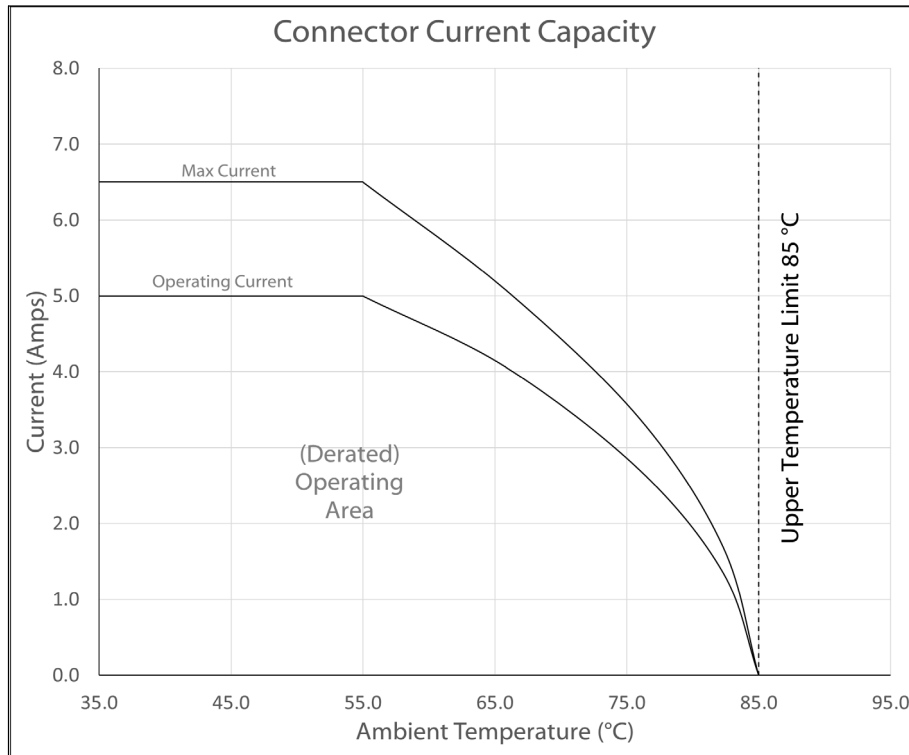
Insertion force: 0.3-3.0 kgf  
Withdrawal force: 0.2-2.0 kgf  
Life cycle: 5000 mating cycles while maintaining contact  
resistance: 100 mΩ maximum, insulation resistance: 50 MΩ  
minimum, withstand voltage: 250 Vac, 1 min.  
Terminal strength: 300 gf applied to the terminal for 15 seconds  
in any direction while maintaining electrical characteristics and  
without damage or excessive looseness of terminals.

## Soldering

Solderability: 75% minimum coverage when terminals dipped 2mm in  $255 \pm 5^\circ\text{C}$  solder bath for  $3 \pm 0.5$  seconds  
Solder bath durability: no deformation when immersed in  $260 \pm 5^\circ\text{C}$  up to surface of the board 1.6 mm for 10 seconds or less  
Solder iron durability: no deformation when exposed to  $350 \pm 10^\circ\text{C}$  for  $3 \pm 0.5$  seconds

## Environmental Requirements

Cold test:  $-25 \pm 3^\circ\text{C}$  for 48 hours without deformation  
Heat test:  $85 \pm 2^\circ\text{C}$ , for 48 hours without deformation  
Humidity test:  $40 \pm 2^\circ\text{C}$ , relative humidity 90-95% for 48 hours without deformation



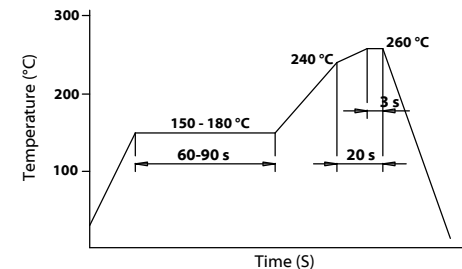
Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions, and does not take into account external factors such as housings, mating cables, or other circuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.



### Reflow Soldering Temperature Profile

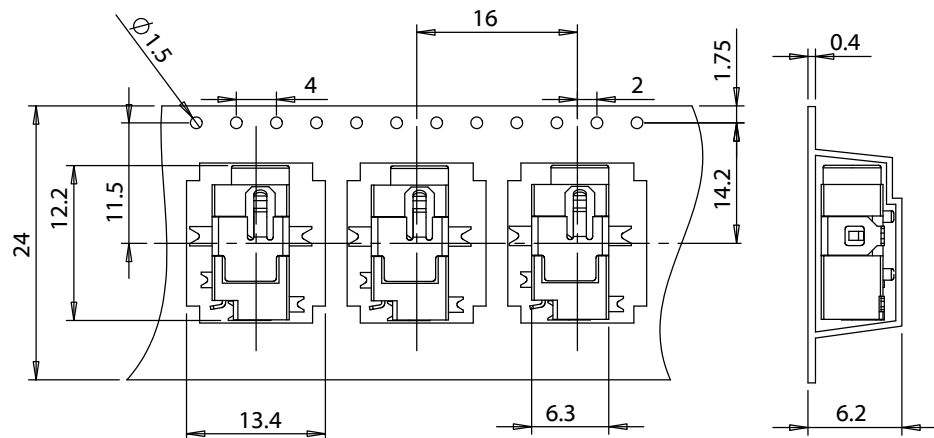
### Pb - Free Flow Profile

Solder conditions vary depending on reflow soldering equipment.

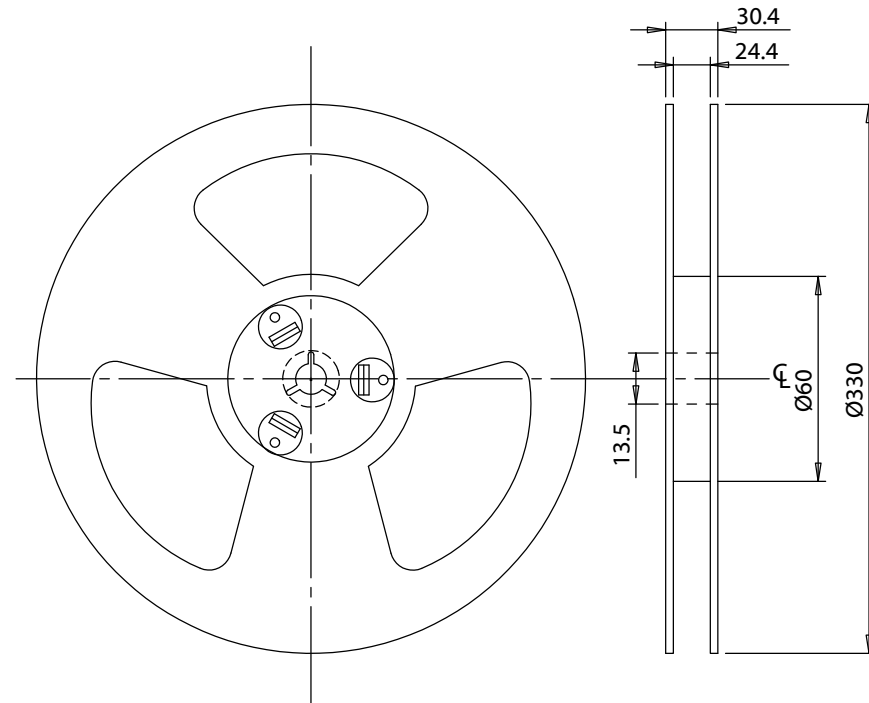
The surface temperature of the jack must not exceed 260 °C.



Revision:	Date:	Description:	Prepared:	Notes:	<div>TENSILITY</div> <div>tel 1.541.323.3228 800 877.670.7118</div> <div>fax 1.541.323.4202 web tensility.com</div>			
A	09/20/2018	Initial release	Verified:	Function test: no open, no short circuit, no intermittent				
			Dimensions are in millimeters. Tolerances: < 1.0: ±0.1 mm 1.0 to 10.0: ±0.2 mm > 10.0: ±0.3 mm	Description: Connector, dc jack 3.5x1.1 mm, 3C, PCB mount, 90°, silver plated, SMT	Size:	Part number:		
					A	54-00150		
					Scale:	4:1		



Not to scale



Not to scale

Packaging details:  
300 pcs. per reel

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					Scale: 4:1		Sheet 3 of 3

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