## Materials

Outer shell: C3604 brass, nickel-plating Front nut: C3604 brass, nickel-plating Insulator: PPS (Polyphenylene sulfide) UL94 V-0, beige

Pin: C38500 brass, 0.2 µm gold-plated, solder cup style Washer p/n 56-00006: cold rolled steel, nickel-plating Nut p/n 56-00007: C3604 brass, nickel-plating

# **Electrical Requirements**

Breakdown voltage: 0.85 kV rms (contact to contact), 0.70 kV rms

(contact to shell)

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 10,000 M $\Omega$  @ 500 Vdc Contact resistance: 30 m $\Omega$  or less, 5000 cycles

# **Mechanical Requirements**

Insertion force: 1.02 kgf average Withdrawal force: 0.82 kgf average Latch force: 18.4 kgf average

Life cycle: 5000 minimum mating cycles at 300 cycles per hour

Shock resistance: 100g, 6 ms

Resistance to vibration: 10-2000 Hz, 15q

# **Environmental Requirements**

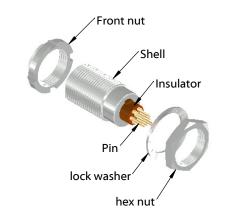
IP50 rating

### Assembly info

Wire gauge: 28 AWG max (Ø0.35 mm)

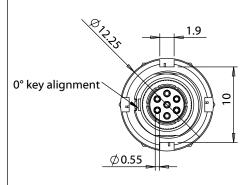
# Mating info

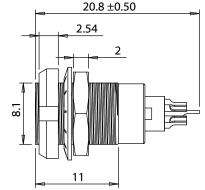
Mates with PPL7 series plug (7 pin)

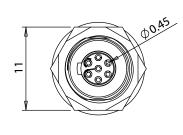








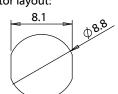


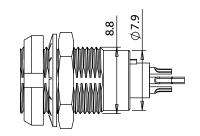


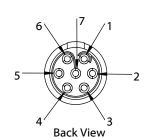
# **Installation Details**

Panel thickness: 5.5 mm max Panel cutout Ø: 8.8 - 11.75 mm

Connector layout:







Revision:	Date:	Description:	Prepared:
Α	12/27/2017	Initial Release	
A1	7/17/2018	Corrected length	Verified:
			Dimensions are in millimeters.
			Tolerances: X: ± 0.5 mm
			X.X: ± 0.3 mm X.XX: ± 0.05 mm

-1						
Verified:						
Dimensions are in						
millimeters.						
Tolerances:						
X: ± 0.5 mm						

Notes:

**RoHS and REACH compliant** 

Function test: no open, no short circuit, no intermittent

Description:

Connector, PPL7, 7C, 0° panel socket, front-back mount, 7x21.7 mm, chrome, solder

tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com

Part number: Size: 51-00027

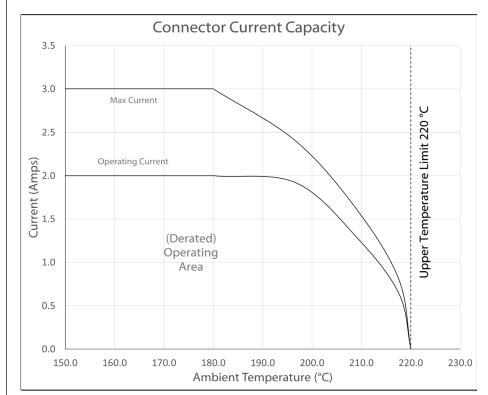
Scale: 2:1



Sheet 1 of 2

Ratings Voltage: 300 V Current: 2.0 A

Operating Temperature Range -55 to 220 °C



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.

Revision:	Date:	Description:	Prepared:	Notes:					
Α	12/27/2017	Initial Release		RoHS and REACH compliant			NSIL	ITY	
A1	7/17/2018	Corrected length	Verified: Function test: no open, no short circuit, no tel 1.541.323.322			323.3228 800 87	800 877.670.7118 web tensility.com		
			Dimensions are in	1		10x 1.541.525.4262 Web terisinty.com			
			<ul> <li>millimeters.</li> <li>Tolerances:</li> <li>X: ± 0.5 mm</li> <li>X.X: ± 0.3 mm</li> <li>X.XX: ± 0.05 mm</li> </ul>	Description:	Size:	Part number:			
				Connector, PPL7, 7C, 0° panel socket, front-back	Α	А 51-00027			
				mount, 7x21.7 mm, chrome, solder	Scale:	2:1		Sheet 2 of 2	

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