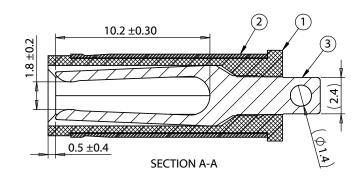
- Materials
  1. Insulator: PBT (Halogen Free), UL 94 V-0, black
  2. Shell: Brass C2700, ≥ 2 μm nickel plated
  3. Spring contac: C5191, ≥ 2 μm nickel plated

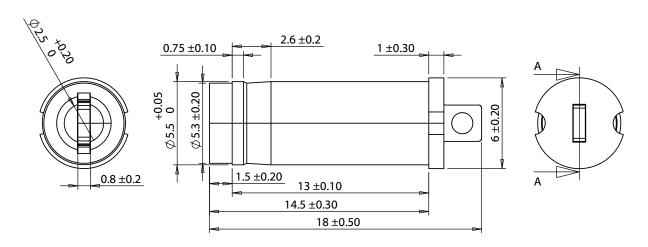
Electrical Requirements
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 M $\Omega$  @ 500 Vdc
Contact resistance: 30 m $\Omega$  or less

## **Mechanical Requirements**

Insertion force: 0.3-3 kgf Withdrawal force: 0.3-3 kgf Life cycle: 5000 mating cycles while maintaining 0.3-2 kgf min. insertion force, 0.2-1.5 kgf min. withdrawal force and less than  $100 \text{ m}\Omega$  contact resistance.







Revision:	Date:	Description:	Prepared:	Notes:				
Α	01/22/2024	Initial release		RoHS compliant		FN	SII	ITY
			Verified:  Dimensions are in millimeters. Tolerances: X: ± 0.3 mm	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			77.670.7118
				Description: Connector, dc plug, 5.5x2.5xL18 mm, molding style, spring contacts, Halogen Free	Size: Part number: A 50-00707			
			X.X: ± 0.2 mm X.XX: ± 0.05 mm		Scale:	: 4:1		Sheet 1 of 2

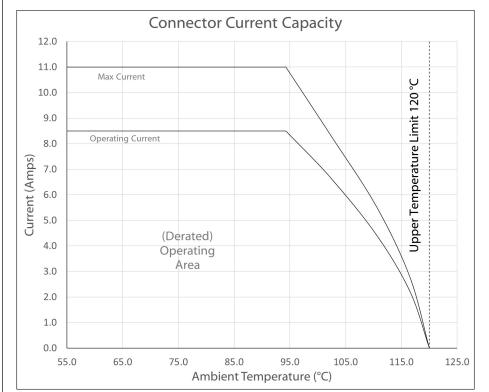
3 5

# Ratings

Maximum Operating Voltage: 48 Vdc Maximum Operating Current: 8.5 A

Operating Temperature Range -25° to 120 °C, relative humidity of 85% or less

5



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	01/22/2024	Initial release		RoHS compliant			NSIL	ITY
			Verified:  Dimensions are in millimeters. Tolerances: X: ± 0.3 mm	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
				Description: Connector, dc plug, 5.5x2.5xL18 mm, molding style, spring contacts, Halogen Free		Size: Part number: A 50-00707		
			X.X: ± 0.2 mm X.XX: ± 0.05 mm			5:1		Sheet 2 of 2

3