Materials

Connector: 50-00591

- Insulator, PBT + 15% glass fiber, UL94 V-0, black
 Shell, H65, nickel-plated
 Tray, C3602, nickel-plated
 Center contact, C5191 phosphor bronze, nickel-plated
- (5) Ground contact, C3602, nickel-plated

Inner Sleeve: 56-00002

(6) Inner sleeve, Nylon UL94V-0

Outer Sleeve: 56-00003 (7) Outer sleeve, TPU, black

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance: 30 m Ω or less

Mechanical requirements

Insertion force: 0.3~3 kgf Withdrawal force: 0.3~3 kgf

Durability: (5000) mating cycles while maintaining; 0.3~3 kgf insertion force, 0.3~3 kgf withdrawal force and a less than $100 \text{ m}\Omega$ contact resistance.

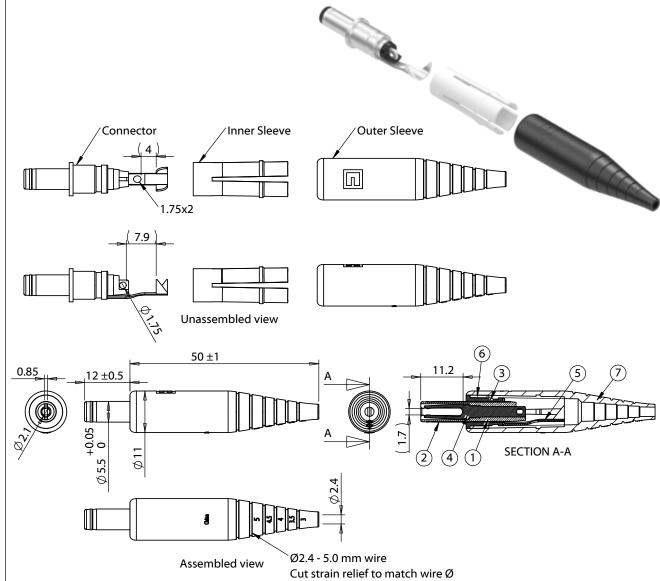
Environmental requirements

Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 70 ±2 °C for 48 hours without deformation Humidity test: 40 ±2 °C and humidity between 90 and 98 % for 96 hours without deformation

5

Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical and electrical

requirements.

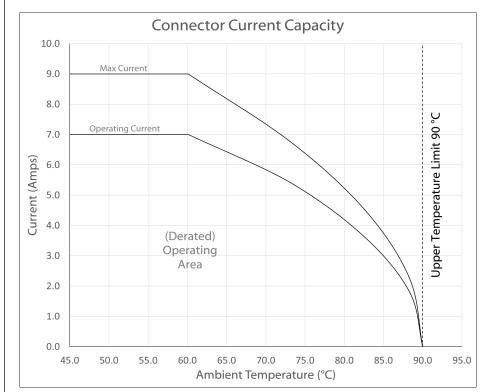


Revision:	Date:	Description:	Prepared:	Notes:				
A	2/13/2018	Initial release		RoHS and REACH compliant		ENSILITY		
			Verified: Dimensions are in millimeters. Tolerances: X: ± 0.5 mm	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com Size: Part number: A 55-00051			
				Description:				
				Connector, 5.5x2.1xL12 mm dc plug, nickel plated,				
		_	X.X: ± 0.3 mm X.XX: ± 0.05 mm	assembly type, spring contacts		: 1:1 Sheet 1 of 2		

3

Ratings Rated voltage: 48 V Rated current: 7 A

Operating range -25 to 90°C, relative humidity of 85% or less



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.

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			Verified: 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	te	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
				Description: Connector, 5.5x2.1xL12 mm dc plug, nickel plated, assembly type, spring contacts	Size: Part number: A 55-00051				
					Scale:	1:1		Sheet 2 of 2	