

Materials

Connector: 50-00591

- ① Insulator, PBT + 15% glass fiber, UL94 V-0, black
- ② Shell, H65, nickel-plated
- ③ Tray, C3602, nickel-plated
- ④ 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 mΩ 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 mΩ contact resistance.

Environmental requirements

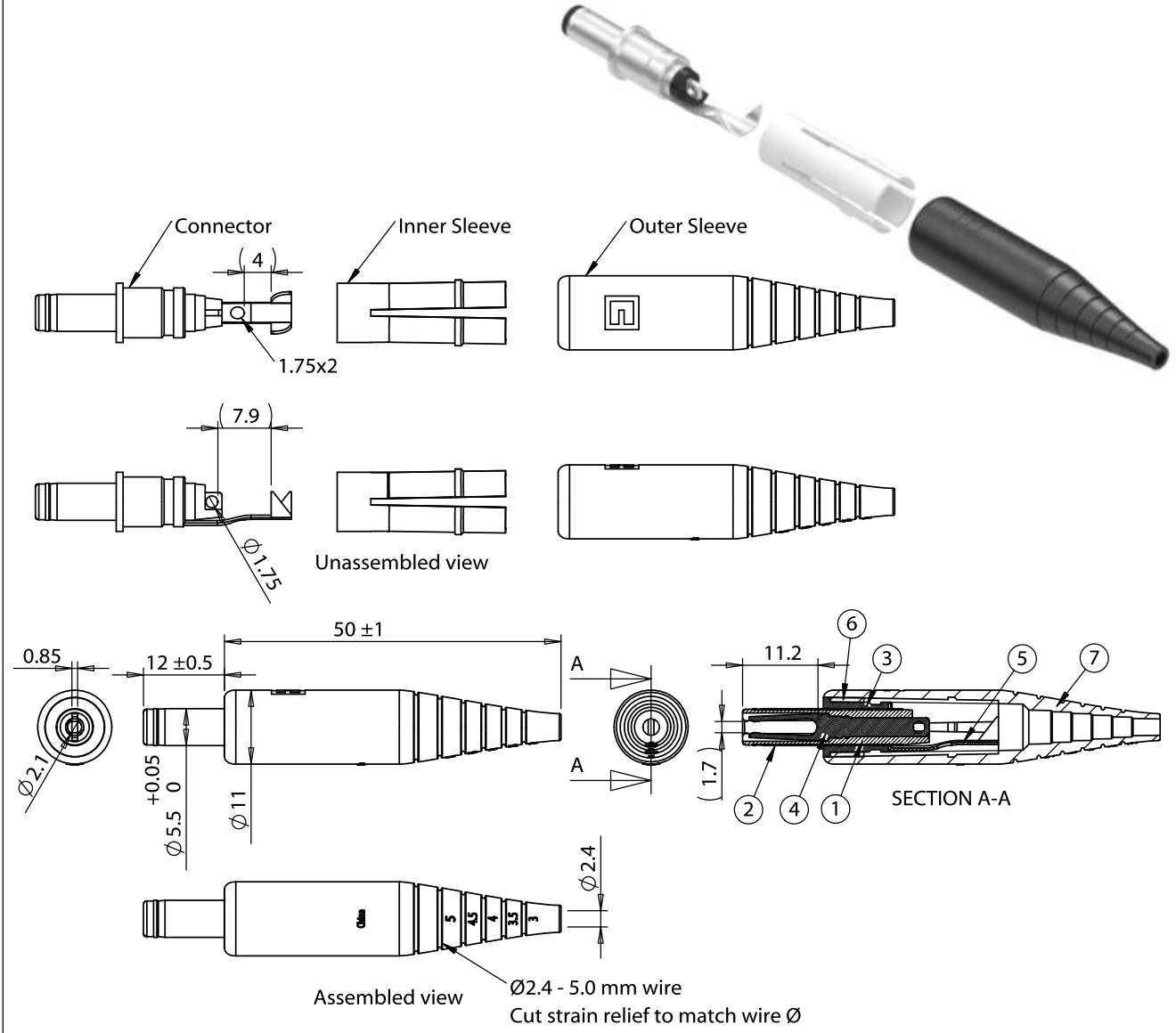
Cold test: -25 ±3 °C for 48 hours without deformation

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

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:
A	2/13/2018	Initial release

Prepared:
AG
Digitally signed by AG
Date: 2018.04.20
10:27:58 -0700

Verified:
PS
Digitally signed by PS
Date: 2018.04.27 15:47:53
-0700

Dimensions are in
millimeters.
Tolerances:
X: ± 0.5 mm
X.X: ± 0.3 mm
X.XX: ± 0.05 mm

Notes:
RoHS compliant

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

Description:
Connector, 5.5x2.1x12 mm dc plug, nickel plated,
assembly type, spring contacts

TENSILITY

tel 1.541.323.3228 800 877.670.7118
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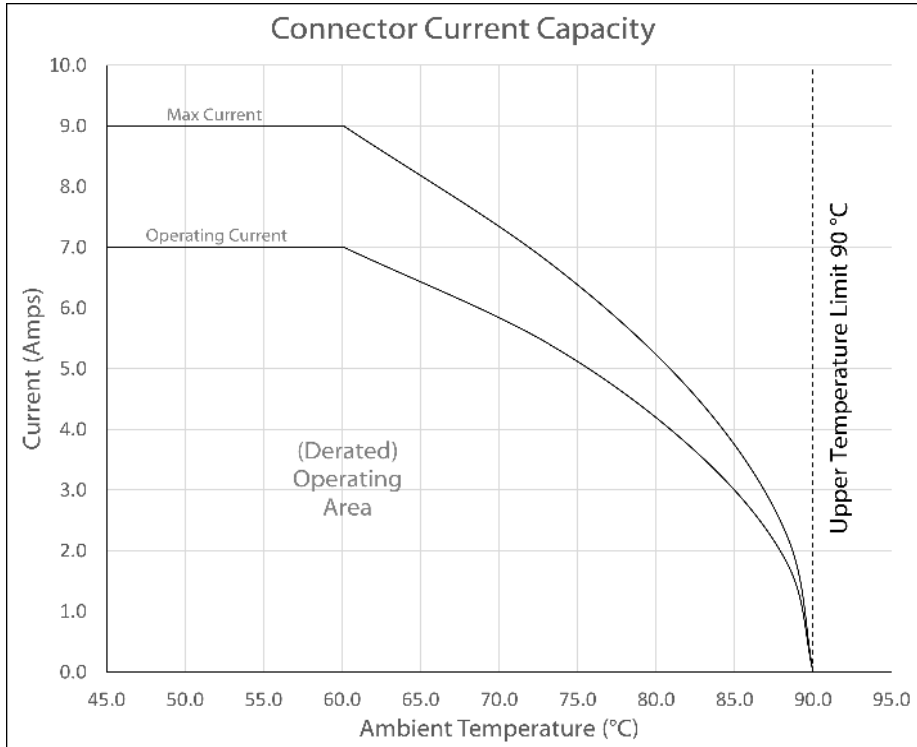
Size:	Part number:
A	55-00051
Scale: 1:1	Sheet 1 of 2

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.

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	2/13/2018	Initial release	AG <small>Digitally signed by AG Date: 2019.03.12 14:57:47 -07'00'</small>	RoHS compliant	
			Verified:	Function test: no open, no short circuit, no intermittent	Size: Part number:
			PS <small>Digitally signed by PS Date: 2019.03.12 14:55:20 -07'00'</small>	Description:	A 55-00051
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Connector, 5.5x2.1xL12 mm dc plug, nickel plated, assembly type, spring contacts	Scale: 1:1 