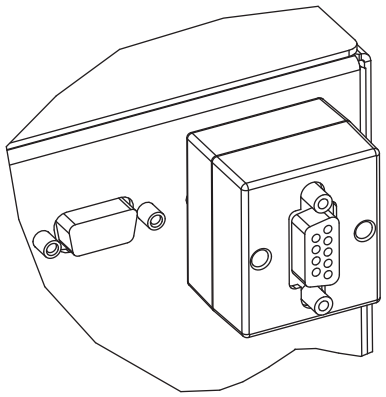
SEL-2910 Port Isolator



Features

The SEL-2910 Port Isolator provides 2500 Vrms of isolation on full duplex EIA-232 communications links.

Specifications

Compliance

Designed and manufactured under an ISO 9001 certified quality management system

RoHS compliant

47 CFR Part 15B, Class A

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Any changes or modifications not expressly approved by the manufacturer can void the user's authority to operate the equipment.

Interface

Conforms to EIA-232
(e.g., serial ports of SEL-200, SEL-300, SEL-400, and SEL-500 series relays)

Connectors

Male and Female DB-9 (see *Figure 1*)

Data Rate

As fast as 40 kbps

Isolation

Transmit, Receive, and IRIG-B to 2500 Vrms

Power Requirements

None, transmit data line powered (EIA-232 Typical ±9 Vdc)

Required EIA-232 Levels

Min. ±5.5 Vdc

Max. ±12 Vdc

Size (H x W x D installed)

3.81 x 3.35 x 2.95 cm (1.5" x 1.32" x 1.16")

Relative Humidity

5 to 95% noncondensing

Set Screw Torque

5 to 7 in-lbs

Operating Temperature Range

–40° to +85°C (–40° to +185°F)

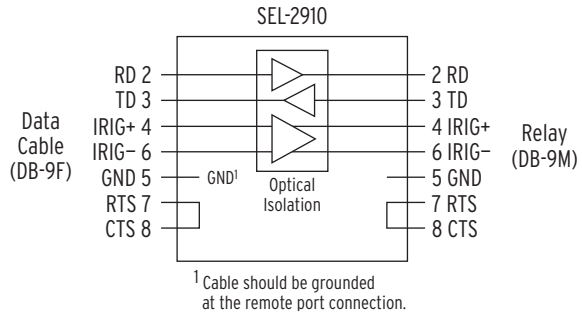


Figure 1 SEL-2910 Port Isolator Block Diagram and Pin Definitions

Type Tests

Cold:	EN 60068-2-1:2007, Test Ad; 16 hr. at –40°C
Dry Heat:	EN 60068-2-2:2007, Test Bd; 16 hr. at +85°C
Damp Heat, Cyclic:	IEC 60068-2-30:2005, +25° to +55°C, 6 cycles, 95% humidity
Vibration:	IEC 60255-21-1:1995, Class 1 (Endurance) Class 2 (Response)
Shock and Bump:	IEC 60255-21-2:1995, Class 1 (Endurance) Class 2 (Response)
Seismic:	IEC 60255-21-3:1995, Class 2 (Quake Response)
Electrostatic Discharge:	EN 61000-4-2:2008, Levels 1, 2, 3, 4, Performance Classification B
	IEEE C37.90.3:2001, Level 3
Insulation Coordination Dielectric (HiPot):	EN 60255-27:2014
	IEEE C37.90-2005 Severity Level: 2500 Vac for 1 minute between male and female DB-9 ports. 2500 Vac for 1 minute between enclosure and DB-9 ports.
Impulse:	EN 60255-27:2014
	IEEE C37.90-2005 Severity Level: 1 kV
Radiated RF Immunity:	EN 60255-26:2013
	IEC 61000-4-3:2010, Severity Level: 10 V/m
Conducted Immunity:	EN 60255-26:2013
	IEC 61000-4-6:2010
Radiated Emissions:	CISPR 11:2009+A1:2010
	CISPR 22:2008
	ANSI C63.4-2014 Class A
	47 CFR Part 15.107 & 109 Severity Level: Class A
	Canada ICES-001 (A) / NMB-001 (A)

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