R SID 15 KVDC

GENERAL SPECIFICATIONS

For Limited Military/Aerospace

Applications

SID Series *

This series of push-on/pull-off connectors provides a reliable 15 KVDC high voltage connection for use in military and aerospace applications.

A unique interface sealing system allows these connectors to perform well under vibration, shock, altitude and temperature extremes. Mated SID assemblies also have good corona characteristics.

SID assemblies are especially well suited for interconnecting high voltage system components. The excellent flexibility of the silicone cable makes system cable routing simple and reliable.

A variety of panel connectors are available as well as straight and right angle cable plug assemblies.

SID assemblies are widely used in:

- Electronic Countermeasure Systems
- TWT connections Lasers

Interface cleaning

High voltage connectors must always be cleaned prior to mating. The proper cleaning method is to wipe or spray the interface area with isopropyl alcohol and immediately blow an inert gas such as dry nitrogen over the interface area until dry. No other cleaning method should be attempted.

WARNING: These connectors should NEVER be handled, mated or unmated when voltage is applied.

GENERAL SPECIFICATION

Altitude operating voltage (mated) Altitude rating Operating temperature range Insulator material Coupling Contact material/finish Cable type

100% voltage test @ 70,000 ft. (simulated) and ambient temperature

Cable Assembly Length vs Manufacturing Tolerance Chart

* Reynolds Industries, Inc. acquired the SID product line from Rowe Industries, Inc. in 1997.

Cable Assemblies (female) 15 KVDC

To 70,000 ft. -55°C to + 95°C Silicone Rubber Push-on/pull off Be Cu/Gold plate (female) Silicone Rubber

20 KVDC

Length: feet/M 7.5/2.28 or less 7.5/2.2 to12.5/3.8 12.5/3.8 to 22.5/6.8 22.5/6.8 to 35/10.6 35/10.6 to 50/15.2 50/15.2 to 70/21.3 70/21.3 to 100/30.4

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Tolerance: inches/mm 0.25/6.3 1.0/25.4 1.50/38.1 2.0/50.8 3.0/76.2 4.0/101.6 5.0/127

Receptacles (male) 15 KVDC

To 70,000 ft. -55°C to +95°C Plastic Push on/pull off Brass/Gold (male) N/A

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20 KVDC







SID^{*} 15 KVDC

Altitude Rated For Limited Military/Aerospace Applications **Operating Temperature:** -55°C to +95°C

Altitude Rated SID **15 KVDC Plug Cable Assemblies** to 70,000 ft. Note: Stranded wire shown on single-ended assemblies is for Length factory testing and is not included in length dimension. <u>.91</u> 23.1 White silicone rubber wire Part Number Wire Dia. <u>.380</u> 9.65 178-6076 0.165 (4.1) 178-6075 0.180 (4.5) A Single-Ended Straight Assembly Mating connector: All SID receptacles Mating method: Push-on/Pull-off Length White silicone rubber wire Part Number Wire Dia. 178-6078 0.165 (4.1) 178-6077 0.180 (4.5) **Double-Ended Straight assembly** Mating connector: All SID receptacles Mating method: Push-on/Pull-off Note: Stranded wire shown on single-ended assemblies is for Length <u>.312</u> Dia. (Nom.) 7.9 factory testing and is not included in length dimension. White silicone rubber wire Part Number Wire Dia. 178-6080 0.165 (4.1) 178-6079 0.180 (4.5) <u>.720</u> 18.2 Single-Ended Right Angle Assembly Mating connector: All SID receptacles Mating method: Push-on/Pull-off .<u>.312</u> Dia. (Nom.) 7.9 Length White silicone rubber wire Part Number Wire Dia. P/N 178-6082 0.165 (4.1) P/N 178-6081 0.180 (4.5) Double-Ended Right Angle Assembly Mating connector: All SID receptacles Mating method: Push-on/Pull-off Length White silicone Part Number Wire Dia. rubber wire P/N 178-6084 0.165 (4.1) P/N 178-6083 0.180 (4.5) **Ordering Cable Assemblies Double-Ended Hybrid Assembly** Mating connector: All SID receptacles Use -XLX to specify cable assembly length. X = feet L X = inches.Mating method: Push-on/Pull-off * Reynolds Industries, Inc. acquired Example: -4L6 is 4 feet, 6 inches. the SID product line from Rowe

Industries, Inc in 1997

SID 15 KVDC

Altitude Rated For Limited Military/Aerospace Applications **Operating Temperature:** -55°C to +95°C

SID

15 KVDC Receptacles

Altitude Rated to 70,000 ft.



Solder-Flanged Receptacle 15 KVDC

P/N 26RC1031 (Male Contact) Mounting: Solder flange Terminal type: Exposed solder tube Body Material: Molded Plastic Mating connectors: Mates all SID cable assemblies Maximum Leakage: 1 x 10⁻⁶ cc/sec. He



Plastic-Flanged Receptacle 15 KVDC P/N 29RC1031 (Male Contact) Mounting: Designed for encapsulation or bonding Terminal type: Flush to recessed solder tube Body Material: Molded Plastic

Mating connectors: Mates all SID cable assemblies



Flanged Jam Nut Receptacle 15 KVDC P/N 60RC1031 (Male Contact)

Mounting: Jam nut flange Terminal type: Exposed solder tube Body Material: Molded Plastic Mating connectors: Mates all SID cable assemblies Seals: "O" ring flange seal Maximum Leakage: 1 x 10⁻⁶ cc/sec. He



Plastic 4-Receptacle Block 15 KVDC (each) P/N 34RC1031 (Male Contact, 4 places) Mounting: Designed for encapsulation or bonding Terminal type: Flush solder tube (4 places) Body Material: Molded Plastic

Mating connectors: Mates all SID cable assemblies Seals: None

Note Block can be precision cut by customer to convert to single, double or triple connector