

SGDI & SGDT Series

- Multi-strike, UL listed gas tube design reliably protects expensive transmitters and receivers.
- Integral mounting bracket for easy wall or panel installation; available 90° mounting adaptor.
- Designed for easy thru-panel or bulkhead installation.
- Stainless steel mounting hardware.

SGDI Series

Designed to inject/pick-off dc bias control voltage through the coaxial cable.

- Weather-sealed stainless steel case provides excellent corrosion resistance for reliable long-term performance.
- Connector weatherproofing is included, not an option at additional cost.
- Silver plated connectors feature TFE dielectrics and either gold (type N) or silver (UHF style) plated center pins.

SGDT Series

Designed to pass dc bias control voltage through the coaxial cable.



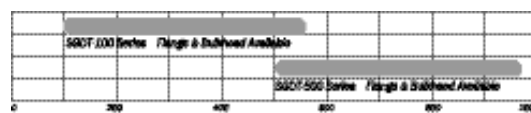
SGDI-20 Series

Frequency Range: 20-700 MHz
Power Rating: 550W@20-220MHz; 300W@220-700 MHz

SGDI-125 Series

Frequency Range: 125-1000 MHz
Power Rating: 550W@125-220 MHz; 300W@220-1000 MHz

Model	Typical Throughput Energy
+15	rf:49.0nJ DC:730μJ
+20	rf:1.76μJ DC:348μJ
+26	rf:1.95μJ DC:1.42mJ
+30	rf:1.60μJ DC:509μJ
+36	rf:0.94μJ DC:762μJ



SGDT-100 Series

Frequency Range: 100-550 MHz
Power Rating: 550W@100-220 MHz; 300W@220-550 MHz

SGDT-500 Series

Frequency Range: 500-960 MHz
Power Rating: 300W@500-960 MHz

Model	Typical Throughput Energy
+15	rf:294μJ
+20	rf:255μJ
+26	rf:644μJ
+30	rf:498μJ
+36	rf:900μJ

Electrical and Mechanical Specifications

Type: DC Blocked Gas Tube
Connectors: Type N female
VSWR: $\leq 1.2:1$ over freq.range
Insertion Loss: $< 0.3\text{dB}$
Throughput: see spec table
Surge: 20kA (8/20 μs), min. 5 surges
Turn On: 350Vdc +/- 15%
Turn On Time: 2.5 μs for 2kV/ns
Temp. Range: -40°C to +85°C
Rel. Humidity: up to 95%
Vibration: 1G at 5 Hz to 100 Hz
Weatherproofing: Sealed case; connector sealant included.

Type: DC Blocked Gas Tube
Connectors: Type N female
VSWR: $\leq 1.2:1$ over freq.range
Insertion Loss: $< 0.2\text{dB}$
Throughput: see spec table
Surge: 20kA (8/20 μs), min. 5 surges
Turn On: 350Vdc +/- 15%
Turn On Time: 2.5 μs for 2kV/ns
Temp. Range: -40°C to +85°C
Rel. Humidity: up to 95%
Vibration: 1G at 5 Hz to 100 Hz
Weatherproofing: Sealed case; connector sealant included.

SGDI Series—Flange Mount

Model	Connectors (Antenna/Equipment)
20-700 MHz** SGDI-20NFNF+XX	N/female + N/female
SGDI-20NMNF+XX	N/male + N/female
SGDI-20NMNM+XX	N/male + N/male
SGDI-20UFUF+XX	UHF/female + UHF/female
125-1000 MHz** SGDI-125NFNF+XX	N/female + N/female
SGDI-20NMNF+XX	N/male + N/female
SGDI-125NMNM+XX	N/male + N/male

**UHF connectors are not recommended at operating frequencies over 450 MHz

SGDT Series—Flange Mount

Model	Connectors (Antenna/Equipment)
20-700 MHz** SGDT-20NFNF+XX	N/female + N/female
SGDT-20NMNF+XX	N/male + N/female
SGDT-20NMNM+XX	N/male + N/male
SGDT-20UFUF+XX	UHF/female + UHF/female
125-1000 MHz** SGDT-125NFNF+XX	N/female + N/female
SGDT-20NMNF+XX	N/male + N/female
SGDT-125NMNM+XX	N/male + N/male

**UHF connectors are not recommended at operating frequencies over 450 MHz

SGDI Series—Bulkhead Mount

Model	Connectors (Antenna/Equipment)
20-700 MHz** SGDI-20NINF+XX	N/female bulkhead + N/female
SGDI-20NINM+XX	N/female bulkhead + N/male
SGDI-20NINI+XX	N/female blkhd + N/female blkhd
SGDI-20UIUF+XX	UHF/female bulkhead + UHF/female
125-1000 MHz** SGDI-125NINF+XX	N/female bulkhead + N/female
SGDI-125NINI+XX	N/female blkhd + N/female blkhd
SGDI-125NINM+XX	N/female bulkhead + N/male

**UHF connectors are not recommended at operating frequencies over 450 MHz

/B 90° inline mounting adaptor

SGDT Series—Bulkhead Mount

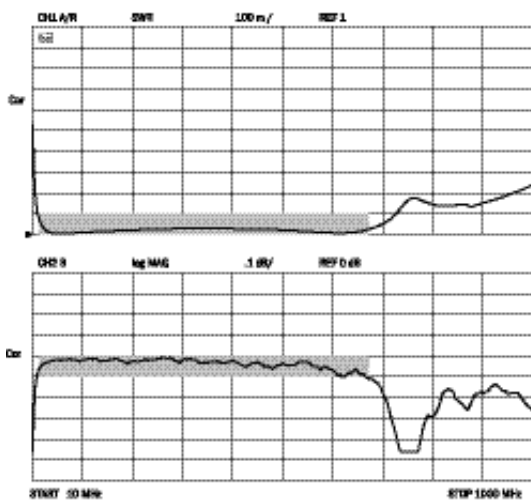
Model	Connectors (Antenna/Equipment)
20-700 MHz** SGDT-20NINF+XX	N/female bulkhead + N/female
SGDT-20NINM+XX	N/female bulkhead + N/male
SGDT-20NINI+XX	N/female blkhd + N/female blkhd
SGDT-20UIUF+XX	UHF/female bulkhead + UHF/female
125-1000 MHz** SGDT-125NINF+XX	N/female bulkhead + N/female
SGDT-125NINI+XX	N/female blkhd + N/female blkhd
SGDT-125NINM+XX	N/female bulkhead + N/male

**UHF connectors are not recommended at operating frequencies over 450 MHz

/B 90° inline mounting adaptor

Stocked Connector Options: NI (N female bulkhead); NM (N male); UF (SO-239); UI (SO-239 bulkhead) Special Order Connector Options: BF (BNC female); SF (SMA female); TF (TNC female)
UHF and Type N connectors are Mil-C-39012, QQ-S365, QQ-B-626, QQ-C-530 and MIL-G-45204 (follows Mil STD 454J) certified. Solder is QQ-S-571 Sn62 compliant.

Typical VSWR & Insertion Loss: SGDI-20NFNF



Typical VSWR & Insertion Loss: SGDT-100NFNF

