

**dc Blocked**



Model shown: IS-50N-CO, flange mount



Model shown: IS-50LN-C2, bulkhead mount

**BROADBAND HF/VHF/UHF COAXIAL PROTECTORS**

**APPLICATION:**

For general radio use; surface or bulkhead mountable options, NOT where transmitter combining is performed.

- Utilizes UL497B listed gas tube
- Models from 1.5MHz to 1000MHz
- Multi-strike capability
- Low strike throughput energy
- Flange mount and bulkhead mount options
- Not weather resistant
- Weatherize using WK-1 (see page 54)
- Aluminum enclosure
- 18-8 stainless steel hardware
- UHF nickel shell silver center, TFE
- N silver shell and gold center pin

**Mil Specs:** Meets 6' all angle drop test, Op to 70,000', MIL-STD-202, 170F Cond. B -65°C to 125°C, rainproof option meets many Mil specs under 202 and 810 for vibration, shock (both), fungus, etc. UHF & N connectors MIL-C-39012, QQ-S-366, QQ-B-626, QQ-C-530 and MIL-G-46204, follows MIL-STD-454J, Solder QQ-S-671 Sn62

**SPECIFICATIONS:**

**Surge:** 50kA IEC 1000-4-5 B/20µs waveform 500 Joules

**Turn-on:** 600Vdc ±20% 2.5ns for 2kV/ns L models

1200Vdc ±20% 7ns for 2kV/ns H models

**VSWR:**

-CO: 1.5 to 2MHz is 1.2 to 1 & 2 to 400MHz is 1.1 to 1

-C1: 50 to 60MHz is 1.2 to 1 & 60 to 700MHz is 1.1 to 1

-C2: 125 to 100MHz is ≤1.1 to 1 type N,

≤1.2 to 1 type F & UHF

**Insertion Loss:** ≤0.1dB over frequency range

**Temperature:** -45°C to +85°C Storage/Operating +50°C

**Vibration:** 1G up to 100Hz

**ORDER INFORMATION:** (Female)

**IS-B50LU-CO** Throughput Energy: ≤10mJ\* (UHF Connector/Bulkhead)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 2kW, VHF 375W, UHF 125W

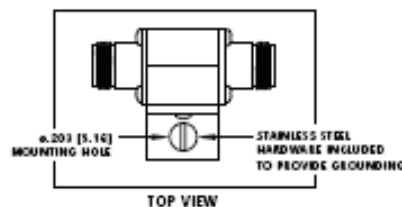
**IS-B50HU-CO** Throughput Energy: ≤20mJ\* (UHF Connector/Bulkhead)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 3kW, VHF 500W, UHF 250W

**IS-B50LU-C1** Throughput Energy: ≤600µJ\* (UHF Connector/Bulkhead)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 375W, UHF 125W

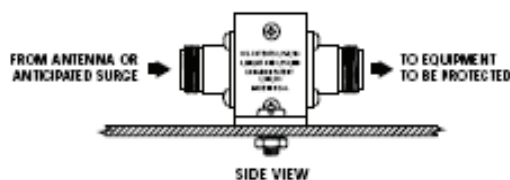
**IS-B50HU-C1** Throughput Energy: ≤1mJ\* (UHF Connector/Bulkhead)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 500W, UHF 250W

**IS-B50LN-CO** Throughput Energy: ≤10mJ\* (N Connector/Bulkhead)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 2kW, VHF 375W, UHF 125W

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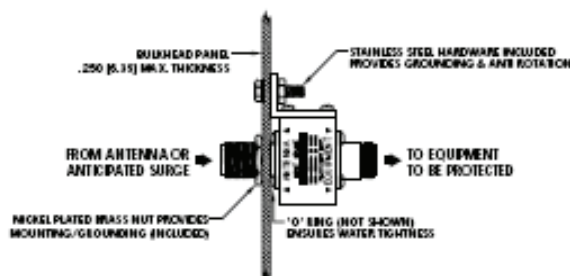


TOP VIEW

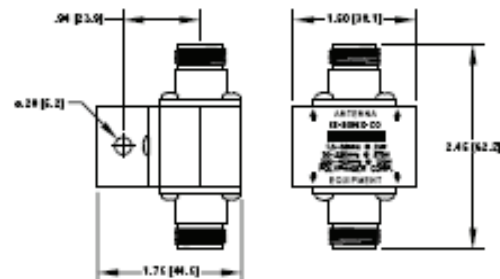


SIDE VIEW

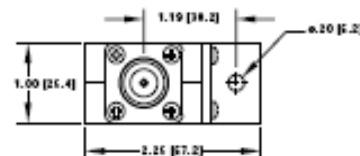
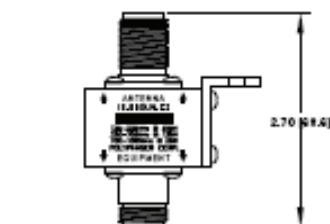
Mounting Configuration: flange mount models



Mounting Configuration: bulkhead mount models



Product Dimensions: IS50NX-C0, flange mount



Product Dimensions: ISB50LN-C2, bulkhead mount

**IS-B50HN-C0** Throughput Energy:  $\leq 20\text{mJ}^*$  (N Connector/Bulkhead)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 3kW, VHF 500W, UHF 250W

**IS-B50LN-C1** Throughput Energy:  $\leq 600\mu\text{J}^*$  (N Connector/Bulkhead)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 375W, UHF 125W

**IS-B50HN-C1** Throughput Energy:  $\leq 1\text{mJ}^*$  (N Connector/Bulkhead)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 500W, UHF 250W

**IS-B50LN-C2** Throughput Energy:  $\leq 220\mu\text{J}^*$  (N Connector/Bulkhead)  
Frequency Range: 125MHz to 1000MHz  
Max. Power: VHF 375W, UHF (low) 125W  
800MHz to 1GHz 50W

**IS-B50HN-C2** Throughput Energy:  $\leq 800\mu\text{J}^*$  (N Connector/Bulkhead)  
Frequency Range: 125MHz to 1000MHz  
Max. Power: VHF 500W, UHF (low) 250W  
800MHz to 1GHz 125W

**IS-50UX-C0** Throughput Energy:  $\leq 10\text{mJ}^*$  (UHF Connector/Surface)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 2kW, VHF 375W, UHF 125W

**IS-50UX-C1** Throughput Energy:  $\leq 600\mu\text{J}^*$  (UHF Connector/Surface)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 375W, UHF 125W

**IS-50NX-C0** Throughput Energy:  $\leq 10\text{mJ}^*$  (N Connector/Surface)  
Frequency Range: 1.5MHz to 400MHz  
Max. Power: HF 2kW, VHF 375W, UHF 125W

**IS-50NX-C1** Throughput Energy:  $\leq 600\mu\text{J}^*$  (N Connector/Surface)  
Frequency Range: 50MHz to 700MHz  
Max. Power: VHF 375W, UHF 125W

**IS-50NX-C2** Throughput Energy:  $\leq 220\mu\text{J}^*$  (N Connector/Surface)  
Frequency Range: 125MHz to 1000MHz  
Max. Power: VHF 375W, UHF (low) 125W  
800MHz to 1GHz 50W

**IS-75F-C1** Throughput Energy:  $\leq 1\text{mJ}^*$  (F Connector/Surface)  
Frequency Range: 4MHz to 900MHz VSWR  $\leq 1.2:1$   
Max. Power: HF 100W, VHF 100W, UHF 25W

Add suffix: **-MA** for male antenna port connector  
**-ME** for male equipment port connector

\*Typical  
Choose lowest throughput energy for desired frequency.  
Energy based on 6kW/3A 8/20 $\mu\text{s}$  waveform.