

Hybrid Line-to-Ground Lightning Protection Assembly

The Model SSS-HBD1 provides Line-to-Ground Lightning Protection on lower voltage power and signal line pairs with a Line-to-Line voltage limit as high as 80 Volts DC or 56Vrms (AC) (i.e. nominal 24VDC power feeders are one application).

Highlights:

- Components are mounted to a printed circuit board that is form and fit compatible with a standard lightning arrester.
- High-Energy 20mm MOV with High-Energy Gas Tube Arrester Protection
- High-Energy Gas Tube Arrester provides air gap isolation
- High-Energy MOV eliminates any continuous follow through arcing of the Gas Arrester
- All components are UL Listed
- Robust and cost effective L-G Protection solution for low voltage signal, power and communication where continuous arcing of the arrester is a concern .

Features:

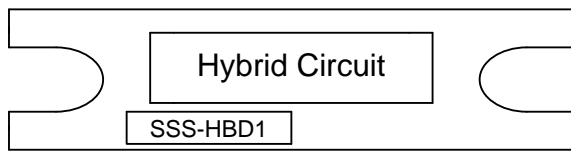
- Mounts on standard AAR terminal blocks (not supplied) with 2-3/8 in. center-to-center post dimensions (standard for lightning arresters) or any AAR terminal block strips that are positioned to accept a standard lightning arrester spacing
- Utilizes open slots at the ends of the circuit board for mounting flexibility and easy maintenance
- All copper traces are on the underside of the board to prevent accidental shorting
- Connection to the AAR Post is on the underside of the circuit board
- Used as Line-to-Ground (L-G) protection on Line Pairs whose Line-to-Line (L-L) Voltage does not exceed 80VDC or 56Vrms
- **Not** to be used for track-wire L-G protection

Electrical Specifications:

- Used as Line-to-Ground (L-G) protection on Line Pairs whose Line-to-Line (L-L) Voltage does not exceed 80VDC or 56Vrms
- Maximum continuous applied DC voltage (across the device) = 40VDC
- Maximum continuous applied AC voltage (across the device) = 28VRMS
- 1mA DC Conduction Voltage Range (steady energy applied) = 148 to 200VDC
- Peak Current Handling Capability = 2000A (8X20usec. Waveform)
- Energy Handling Capability = 160 Joules
- Typical Capacitance = 1pF
- Operating Temperature = -40°C to +70°C
- DC Breakdown Voltage typical = 175 Volts
- Typical firing voltage for a 1000V/usec. transient is approximately 750 Volts Peak
- Arc Voltage (across the device) = 42 Volts minimum
- Insulation Resistance = 1GOhms minimum
- Surge Life = 1000 minimum @500A (10X1000usec.)

Dimensions:

Overall Circuit Board
 $\frac{3}{4}$ inch X 3 inch



Actual Size

Schematic :

