



## Line-to-Ground Lightning Protection Assembly using a high energy Gas Discharge Tube

The Model SSS-G145CB provides Line-to-Ground Lightning Protection on lower voltage power and signal line pairs with a Line-to-Line voltage limit of 20VDC or 14 Vrms (AC) (i.e. nominal 12VDC 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 20VDC or 14Vrms
- **Not** to be used for track-wire L-G protection

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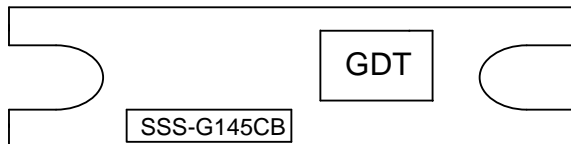
**Electrical Specifications:**

- Used as Line-to-Ground (L-G) protection on Line Pairs whose Line-to-Line (L-L) Voltage does not exceed 20VDC or 14Vrms
- Maximum continuous applied DC voltage (across the device) = 10VDC
- Maximum continuous applied AC voltage (across the device) = 14VRMS
- 1mA DC Conduction Voltage Range (steady energy applied) = 115 to 175VDC
- Peak Current Handling Capability = 20kA (8X20usec. Waveform)
- Typical Capacitance = 1pF
- Operating Temperature = -40°C to +70°C
- DC Breakdown Voltage typical = 145 Volts
- Typical firing voltage for a 1000V/usec. transient is approximately 700 Volts Peak
- Arc Voltage (across the device) = 12 Volts minimum
- Insulation Resistance = 1GOhms minimum
- Surge Life = 1000 minimum @500A (10X1000usec.)

**Dimensions:**

**Overall Circuit Board**

**3/4 inch X 3 inch**



**Actual Size**

**Schematic :**

