

## **DLP-4.90**

Heavy Duty Surge Suppression Device

For protecting Token Ring, RS232/422/423/485, Loops, Telco Equipment

### **1.0 GENERAL**

#### **1.1 DESCRIPTION**

These specifications describe the electrical and mechanical requirements for a rapid- responding transient voltage surge suppressor. The specified surge protective device shall provide effective high-energy surge diversion for application on telco equipment, signal and data carrying lines. Testing & certified per UL 497. The specified surge protective device shall provide:

- 400 A (8/20us) surge current ratings must be independently tested & verified.
- Clamping crowbar to permit higher Ipeak capability.
- All signal lines, individually protected with respect to chassis ground.
- Must be provided with RJ11 connectors, protecting all pins 1-6.
- 6 inch or less chassis ground wire with lugs will be included
- TEN YEAR WARRANTY. Replacement units are sent from factory, located in Deer Park, New York, USA.

#### **1.2 STANDARDS**

The specified suppressor shall be designed, manufactured, tested and installed in compliance with:

- Institute of Electrical and Electronic Engineers IEEE-472
- Federal Communications Commission Docket 68
- Bellcore standards 974 and 1089
- National Fire Protection Association (NFPA 20, 70, 75 and 78)
- Underwriters Laboratories (UL-497A and 497B ) listed
- CAN/C22.2 No. 8-M1986; CSA Electrical Certification Notice No. 516

#### **1.3 PROTECTED EQUIPMENT ELECTRICAL REQUIREMENTS**

##### **1.3.1 Environmental Requirements**

###### **A. Operating Requirements:**

1. Operating temperature range shall be -40 to +71 degrees C (-40 to +160 degrees F).
2. Storage temperature range shall be -40 to +85 degrees C.
3. Operation shall be reliable in an environment with 0% to 95% non-condensing relative humidity.
4. The system shall be capable of operation up to an altitude of 13,000 feet above sea level.

##### **1.3.2 Electrical Requirements**

###### **A. Electrical Requirements:**

1. Preferred method of ground connection, protector to protected device chassis, 6" or less.
2. Clamp voltages available shall be 6,25, 60 and 200 Volts and the attenuation less than 1 db @ 70 MHz.

3. The transient suppression capability shall be bi-directional and suppress both positive and negative impulses.
4. The suppressor shall be designed so as to minimize the internal surge path impedance. Direct point-to-point internal wiring is inherently inductive and not acceptable. Connection to the protected device shall be constructed as shown in the installation notes for best performance.
5. Equipment shall be as manufactured by MCG Surge Protection; Model: DLP-4.90 or engineering department approved equal with supporting data.

## **2.0 MODEM, FACSIMILE, TELCO PROTECTION SYSTEM**

**A. Protection Modules:** The suppressor shall be constructed as a low profile, high-impact 94.VO plastic module. The suppressor shall provide, for each entering signal wire, a high speed diode bridge and a clamping crowbar. Protector will be made available, with no additional cost to user, UL 497A (fused for accidental crossing of power and signal lines) or UL 497B (no fuse). Care should be taken to adhere to installation notes supplied with protector that requires a short (6" or less) direct connection to ground.

**B. Enclosure:** UL 94V.O flammability, high-impact plastic.

**C. Dimensions:** 3.7"x 1.05"x 1.05"

## **3.0 INSTALLATION AND MAINTENANCE**

- A.** The unit shall be installed in accordance with the manufacturer's printed instruction to maintain warranty. All local and national codes must be observed.
- B.** Units shall be installed as close as possible to the device to which it is connected
- C.** Detailed installation/maintenance notes shall be provided to insure safety of maintenance personnel.
- D.** Repair time should not exceed 5 minutes.

## **4.0 10 YEAR WARRANTY**

Manufacturer to provide 10-year warranty to cover repair or replacement with a new device. Manufacturer to provide no cost replacement of DLP-4.90. Restrictions apply. See "Warranty & Limitations of Liability", document part No. 299-200-06.