Suppressor Module and Terminal Connector

KMD-5567

Installation Guide

Introduction

The KMD-5567 is installed at building exits and entrances to provide surge suppression for one or two pairs of low-voltage data signal lines. When properly installed and wired, the KMD-5567 can protect the digital communication circuitry from lightning damage.

In smoke control applications, one KMD-5567 is also required for the EIA-485 terminals of every controller and repeater as well.

See Illustration 1 for a diagram and dimensions of the module and terminal connector. The suppressor consists of two parts, the Suppressor Module (HPO-0066) and the Terminal Connector (HPO-0067).

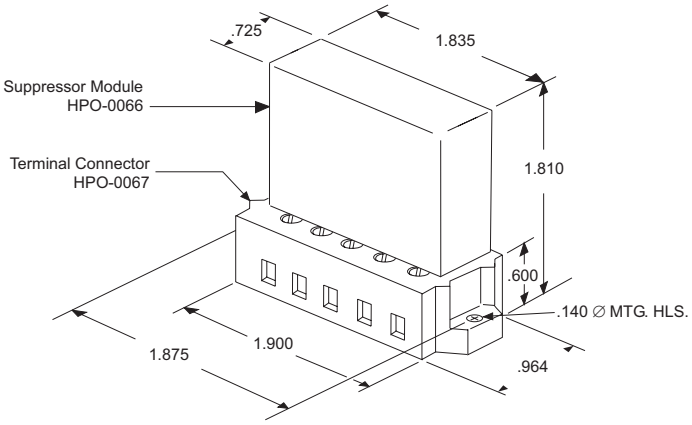

Illustration 1—KMD-5567 Components and Dimensions

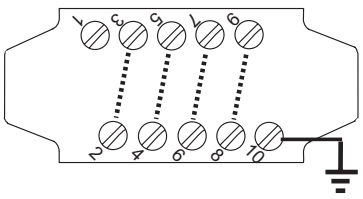

Illustration 2—KMD-5567 Terminal Connections

Installation and Wiring

Network Protection, Multiple Building

The KMD-5567 should be located near locations where communication circuits enter and exit the building. See Illustration 3.

1. Mount the module in a suitable enclosure using the provided mounting holes.

NOTE: Orienting the unprotected terminals on the same side as the incoming or exiting wiring may simplify the wiring process.

2. Connect the incoming or exiting wires to the unprotected side (pairs 3/5 and/or 7/9). See Illustrations 2 and 3.
3. Connect the protected side pairs (2/4 and/or 6/8) to the destination device wiring.
4. Connect an equipment ground to either Pin 1 or Pin 10, but not both.

Individual Controller Protection

NOTE: This is required in smoke control applications on every controller and repeater.

1. Mount the module in a suitable enclosure using the provided mounting holes.
2. Connect the EIA-485 wires from the previous controller or repeater to the appropriate terminals as shown in Illustrations 2 and 4.
2. If applicable, connect the EIA-485 wires from the next controller or repeater to the appropriate terminals as shown in Illustrations 2 and 4.
3. Connect the KMD-5567 "protected side" terminals to the controller as shown in Illustrations 2 and 4.
4. Connect an equipment ground to either Pin 1 or Pin 10, but not both.

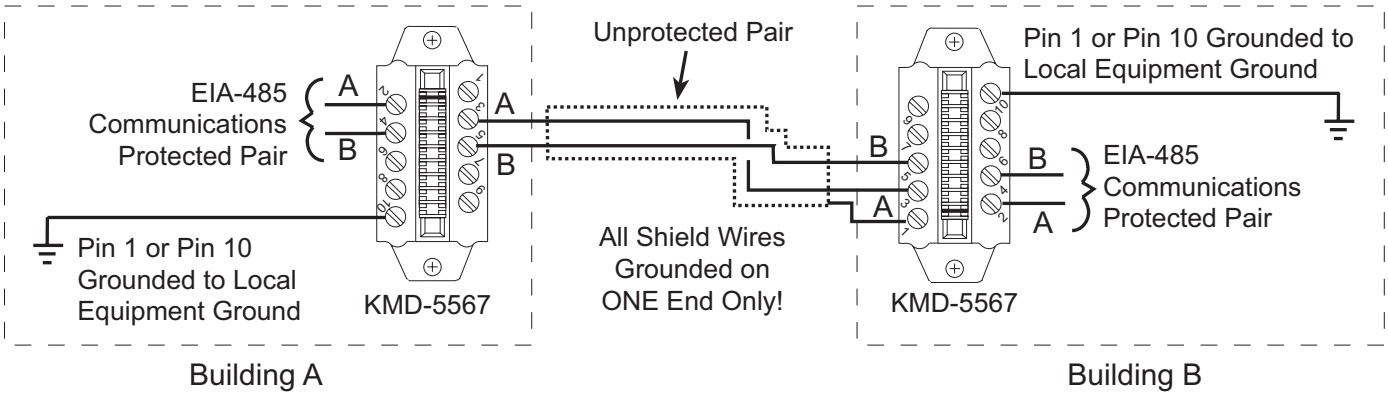

Illustration 3—Network Protection with Multiple Buildings

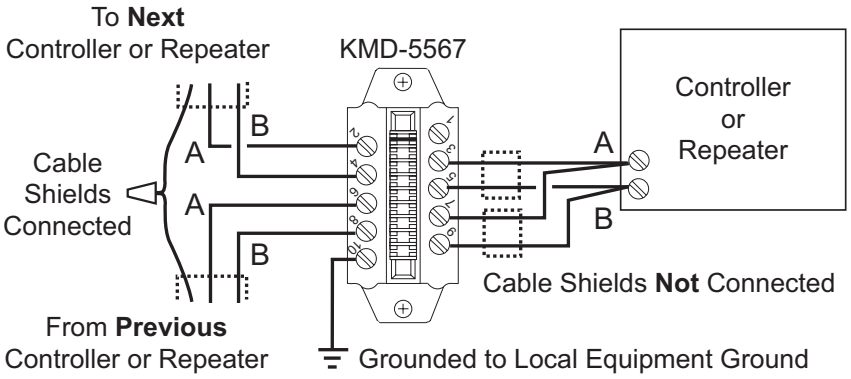

Illustration 4—Individual Controller Protection (Required in Smoke Control Applications)

Accessories

HPO-0066	Suppressor Module
HPO-0067	Terminal Connector

Specifications

Peak Surge Current	8 x 20 µs 10 kA
	10 x 700 µs 500 A per line
Life Expectancy	8 x 20 µs (2000 A), 100 Occurrences
	10 x 700 µs (400 A) 100 Occurrences
Response Time	<1 Nanosecond
Voltage Clamp	15 Volts
Technology	Silicon Avalanche Diode Hybrid
Resistance	8.0 ohms per line
Capacitance	1500 pf (average)
Weight	2.0 oz. (56.7 g)
Ambient Limits	
Operating	–40° to 185° F (–40° to 85° C)
Shipping	–40° to 185° F (–40° to 85° C)
Humidity	0 to 95% RH, non-condensing

Operation

Once installed, the KMD-5567 Suppressor Module requires little user intervention. If the suppressor is damaged because of a lightning strike, causing the protected circuit to open, simply replace the HPO-0066 Suppressor Module.

Maintenance

No routine maintenance is required. Each component is designed for dependable, long-term reliability, and performance. Careful installation will also ensure long-term reliability and performance.

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