



## Power-Over-Ethernet (POE)

### MJ8-POE



The MJ8-POE is designed to protect sensitive data-processing equipment connected to a PoE (Power over Ethernet) network from transient over voltages.

The MJ8-POE protector is deployed in signal network applications with data transmission speeds of 100 and 1000 Mbps. The surge protector is housed in a shielded enclosure with high quality RJ45 shielded jacks.

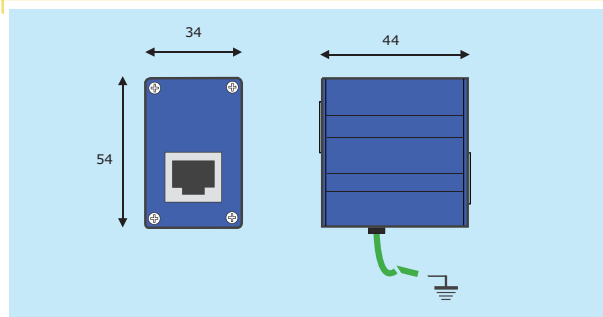
The transient protection circuit is based on high energy gas discharge tubes (GDT) and a network of fast response silicon avalanche diodes (SAD) to achieve sharp clamping of very large surge events.

- Surge Protection PoE network & Gigabit Ethernet
- 100 Base T/1000 Base T compatible
- Shielded enclosure and connectors
- 2 kA discharge capability

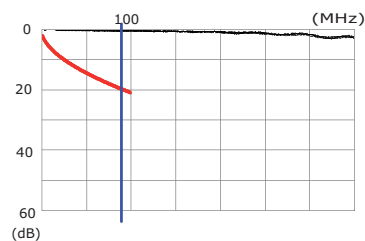
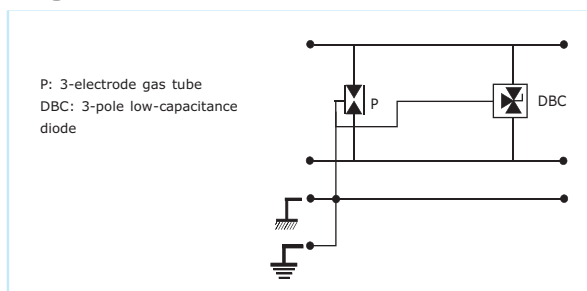
### Characteristics

CITEL part number	MJ8-POE-A	MJ8-POE-B
Application	PoE and Gigabit Ethernet Networks	PoE and Gigabit Ethernet Networks
Max. data rate	1000 Mbps	1000 Mbps
Standard Compliance	IEEE 802-3ab (transmission) IEC 61000-4-5 (surge withstand)	IEEE 802-3ab (transmission) IEC 61000-4-5 (surge withstand)
Connections:		
-input	RJ45 shielded	RJ45 shielded
-output	RJ45 shielded	RJ45 shielded
Pinout	8 wires + shielding	8 wires + shielding
Max. DC Power Supply	60 Vdc - 650 mA	7.5 Vdc (1,2,3,6) - 650 mA 60 Vdc (4,5,7,8) - 650 mA
Nominal discharge currents:		
-Line/Line	<500 A @ 8/20 $\mu$ s	<500 A @ 8/20 $\mu$ s
-Line/Ground	2000 A @ 8/20 $\mu$ s	2000 A @ 8/20 $\mu$ s
Enclosure	Metal	Metal
Connection to bonding network	Screw Terminal	Screw Terminal

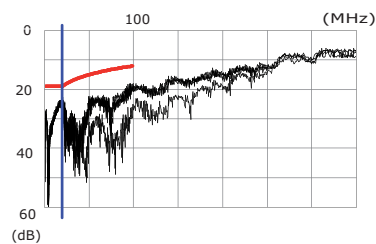
### Dimensions and Diagram



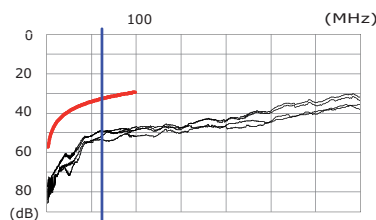
### Diagram for Each Pair



**Insertion Loss**  
1.2 dB @ 100 MHz



**Return Loss**  
20 dB @ 100 MHz



**NEXT**  
45dB @ 100 MHz

red curve: maximum limit