

SP208GM

PoE Surge Protection Device



General Description

The SP208GM from Versa Technology is a surge protection device that provides superior lightning and surge protection with improved frequency response for indoor 10/100 Base-T Ethernet networks. In addition, the unit is compatible with 802.3af/at Power-over-Ethernet (PoE) and Ultra PoE devices. Integral to the design is protection for the four Ethernet data pairs and the PoE DC power feed.

Features:

- Gigabit PoE (802.3af / 802.3at)
- Protect all 8 lines (CAT5 / CAT6)
- IEC 61643-21
- IEC 61000-4-5
- ITU-T K-Series

Equivalent Circuit

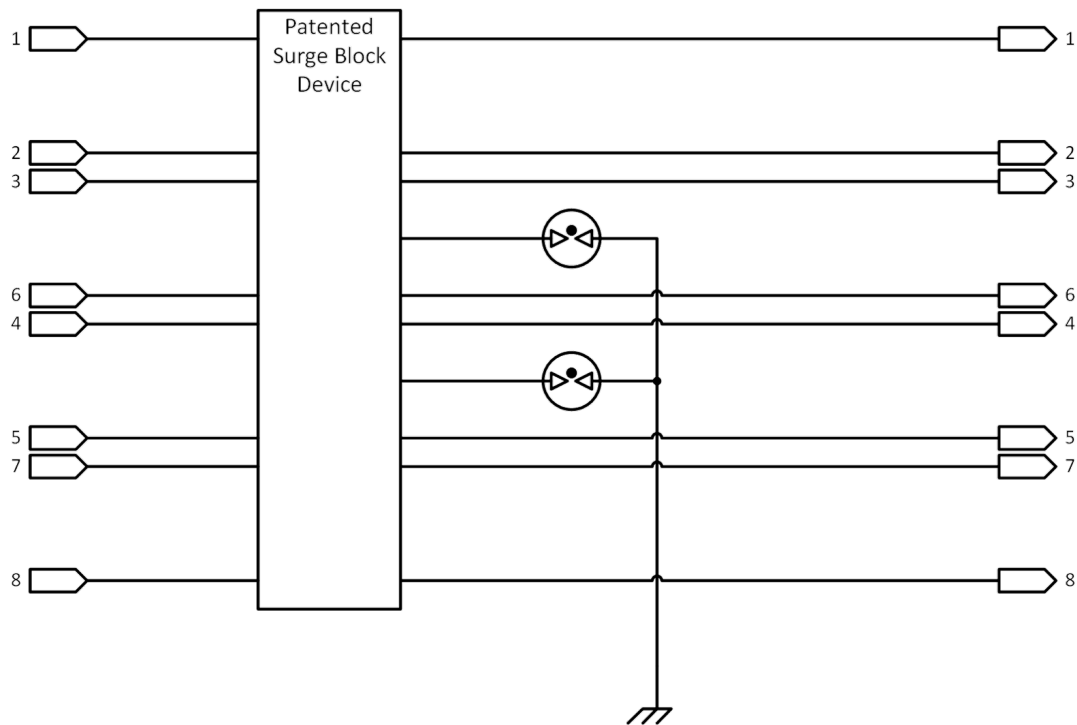


Fig. 1 Equivalent Circuit

Specifications



Electrical Characteristics

Parameter	Symbol	Value	Units
Max. Discharge Current (8/20us, 1KA per line*)	I_{PP}	8	KA
Max. Operation DC Voltage	V_{RWM}	60	VDC
Max. Operation DC Current	I_{DC}	1	A
Common Mode Protection Level (10/700us)	V_{CMP}	20	KV
Differential Mode Protection Level (10/700us)	V_{DMP}	4	KV
Clamping Voltage (Line to GND)	V_{CCM}	600	V
Clamping Voltage (Line to Line)	V_{CDM}	20	V
Operating Temperature	T_J	-40 to 85	°C
Data Rate	-	10/100/1000	Mb/s
Insertion Loss @ 10MHz/100MHz	IL (Max)	1	dB
Return Loss @ 10MHz/100MHz	RL (Max)	-20	dB
Response Time	-	5	ns

*Note: Max. 8KA total discharge current can be reached only when currents are balanced on each line.

Transfer Characteristics

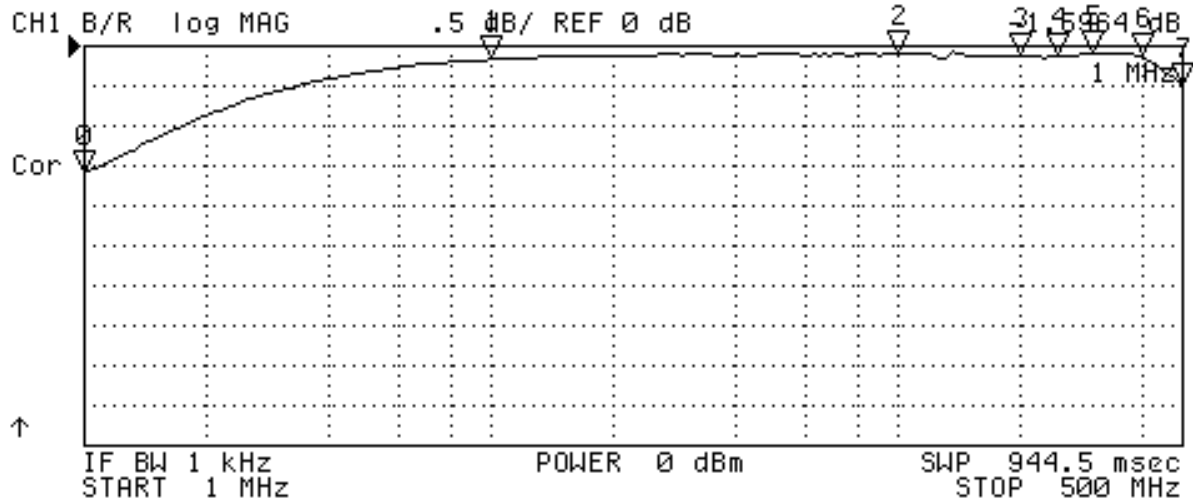


Fig. 2 Insertion Loss

Application

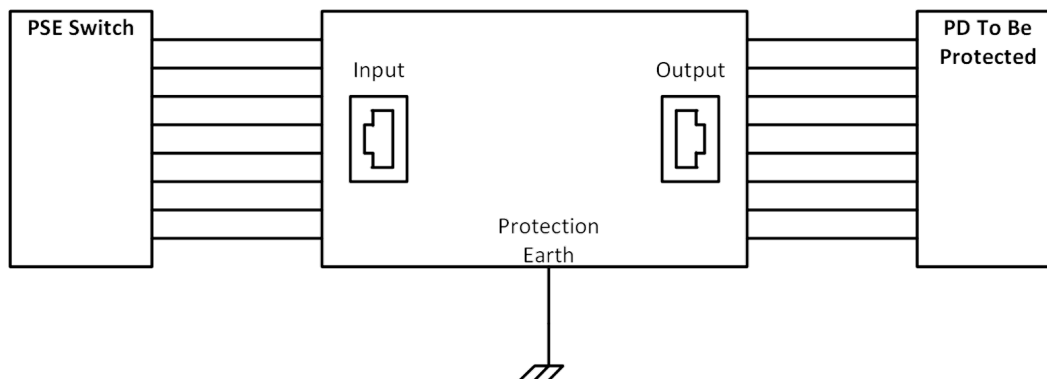


Fig. 3 Typical Application

PD Onboard Configuration

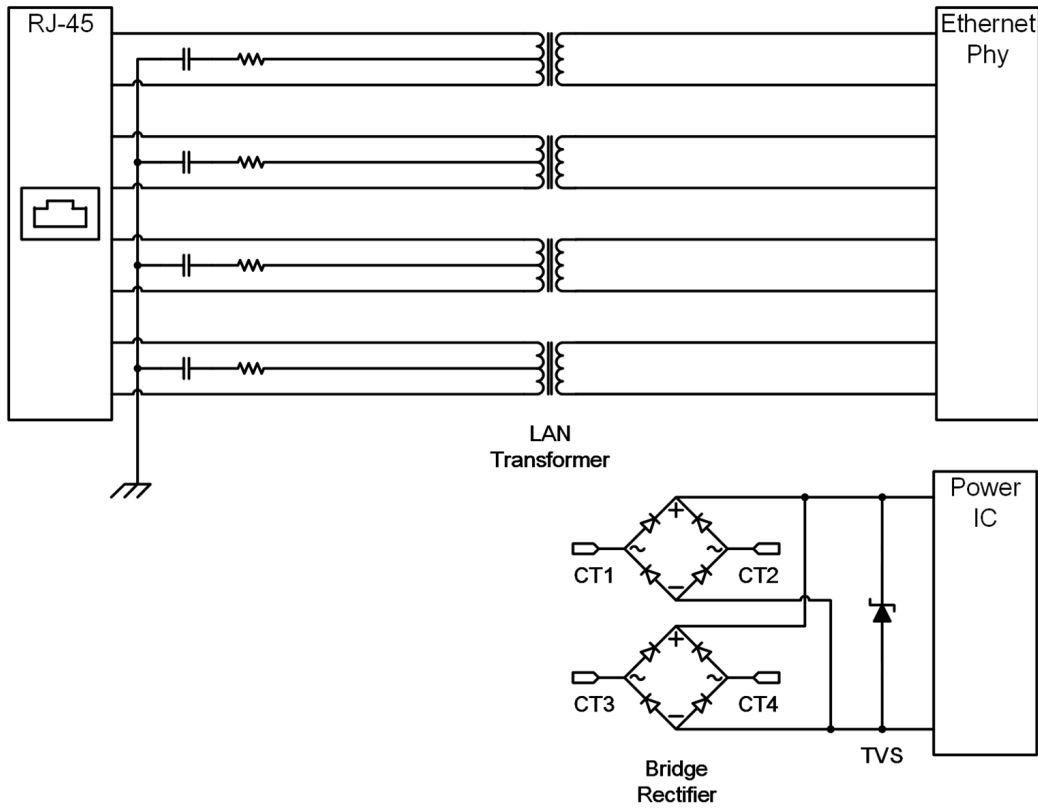


Fig. 4 Recommended PG Configuration

Device Outline

Dimension: mm

