

## PoE SURGE PROTECTION DEVICE

### General Description

*SP208G is a surge protection device to provide ultra high surge protection capability to all signal path. It employed our patented surge blocker with shunt devices and parallel devices to guarantee the safety of your device. Additionally, the operation indicator will turn on while protector being out of life.*

### Features

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

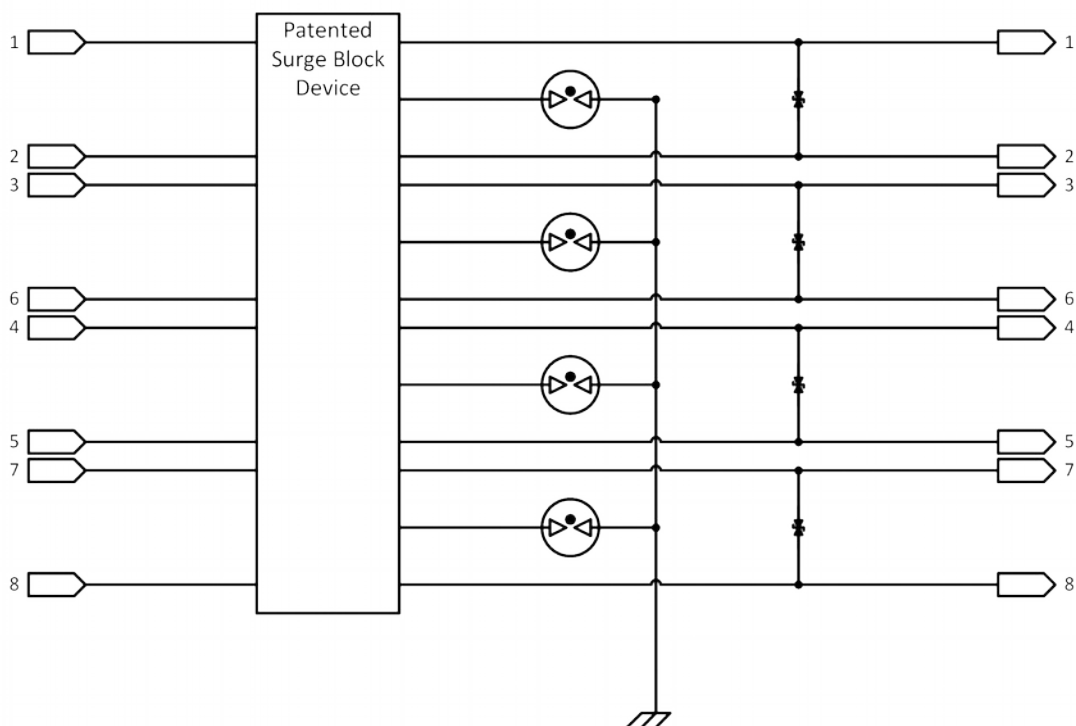


Fig.1 Equivalent Circuit

# SP208G

## DEVICE CHARACTERISTICS

Parameter	Symbol	Value	Units
Nominal Discharge Current (8/20us) Note	IPP	8	KA
Maximum Operation DC Voltage	VRWM	60	Vdc
Maximum Operation DC Current	IDC	1	A
Common Mode Protection Level (10/700us)	VCMP	20	KV
Differential Mode Protection Level (10/700us)	VDMP	4	KV
Clamping Voltage (Line to GND)	VCCM	150	V
Clamping Voltage (Line to Line)	VCDM	20	V
Operation Temperature	TJ	-40~85	°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 10KA total discharge current can be reached while currents are balanced on each line.

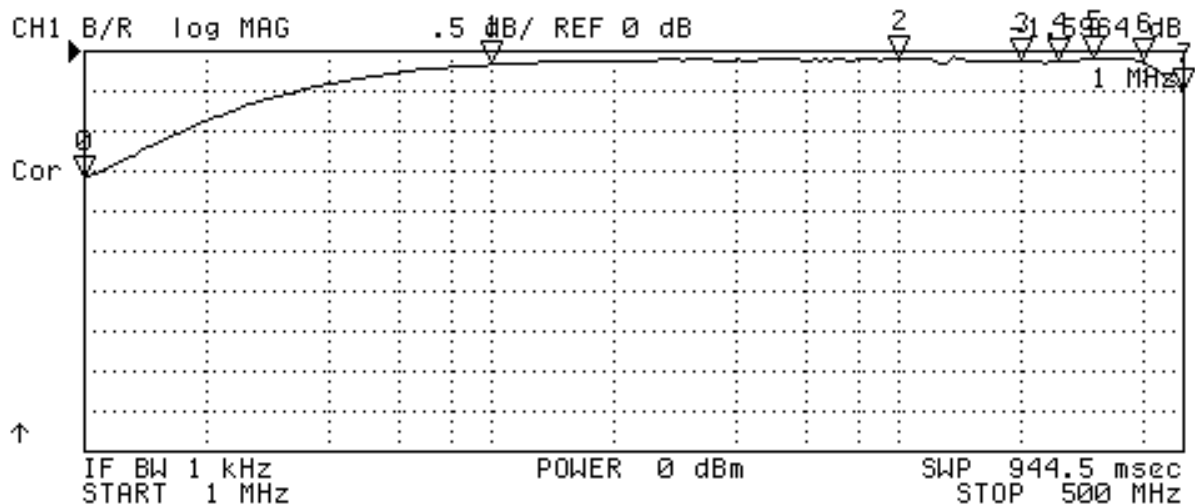


Fig.2 Insertion Loss

# SP208G

## TYPICAL APPLICATION

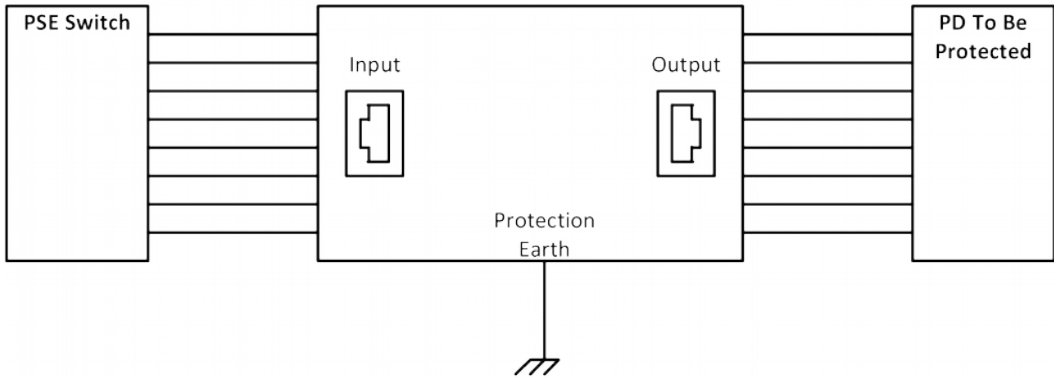


Fig.3 Typical Application

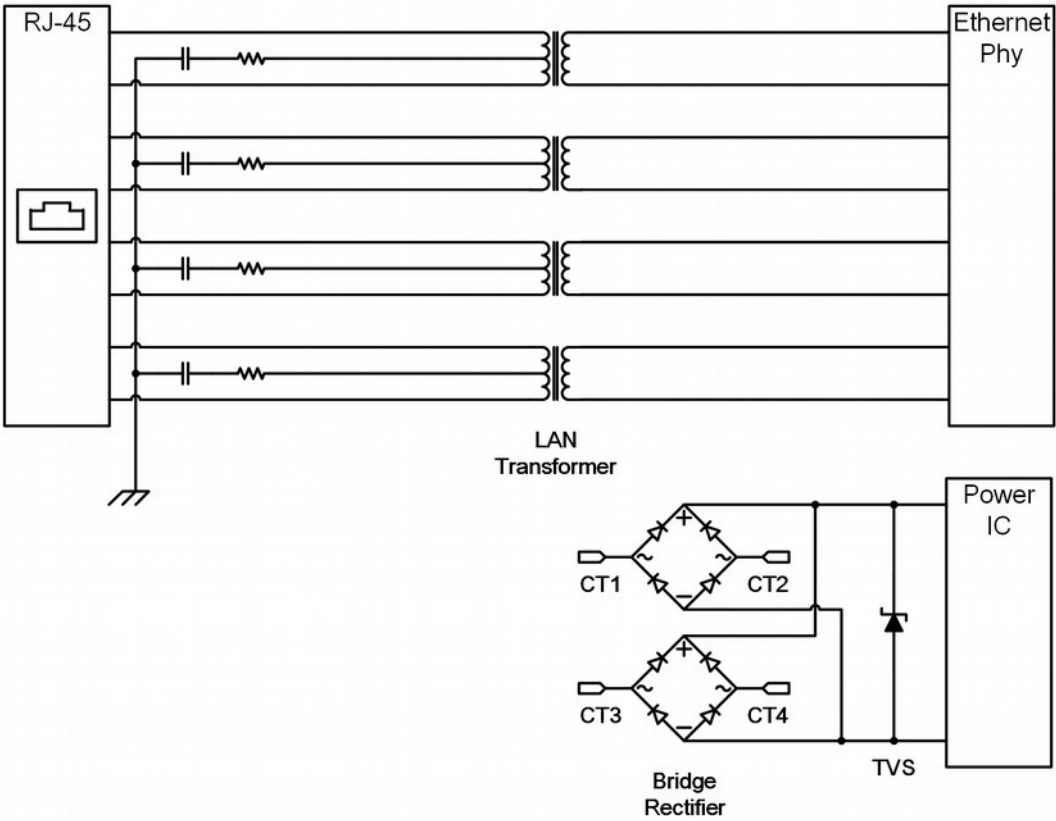
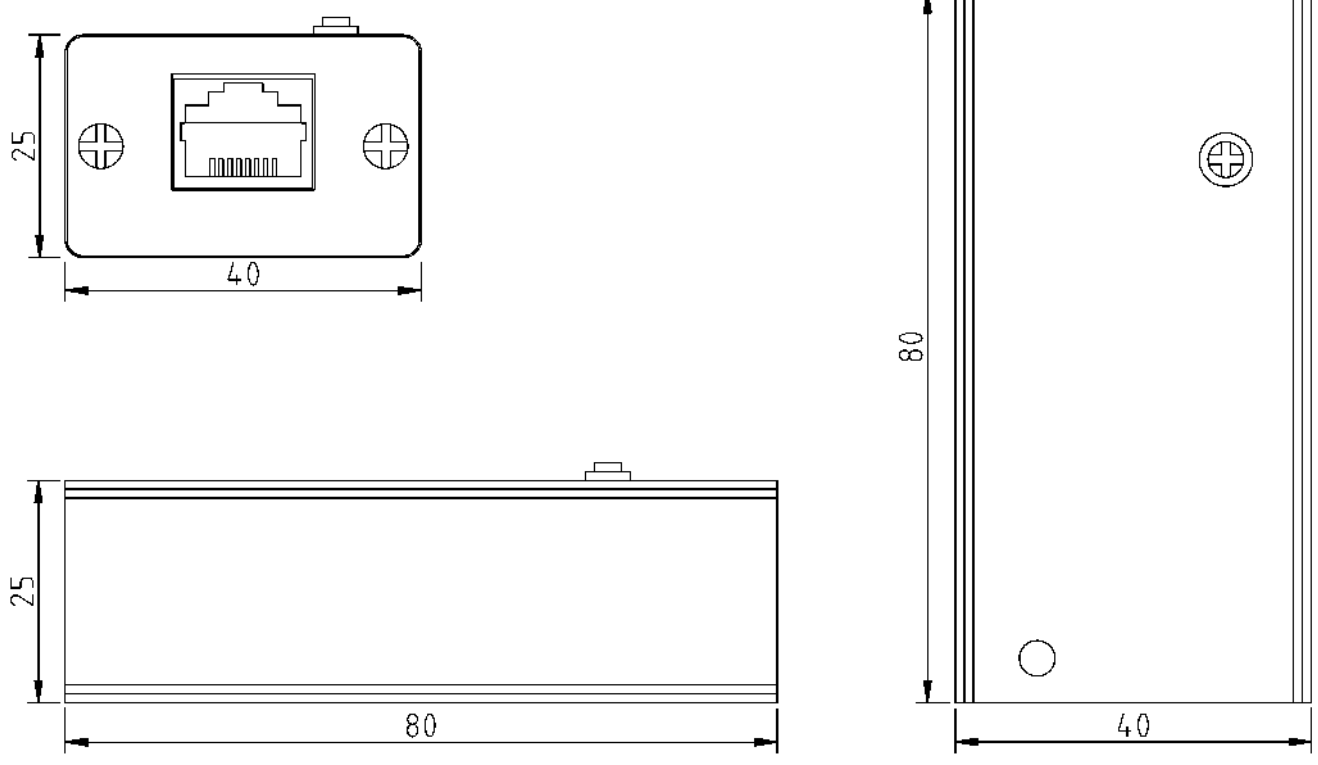


Fig.4 Recommend PD Configuration

# SP208G

## DEVICE OUTLINE

*Dimension : mm*



**Rev.1.0**  
**Rev.1.01**

*Modification Description*  
**Initial Release**  
**Edit Document Layout**