

## I/O SURGE PROTECTION DEVICE

### General Description

PD05-P3H is a surge protection device to prevent Signal path from damage of surge impulse. This design is fit for RS-232/485 or similar application.

### Features

- ◆ Dual Line Legacy I/O Protection
- ◆ Protect Common Mode and Differential Mode
- ◆ IEC 61000-4-5
- ◆ IEC 61643-21

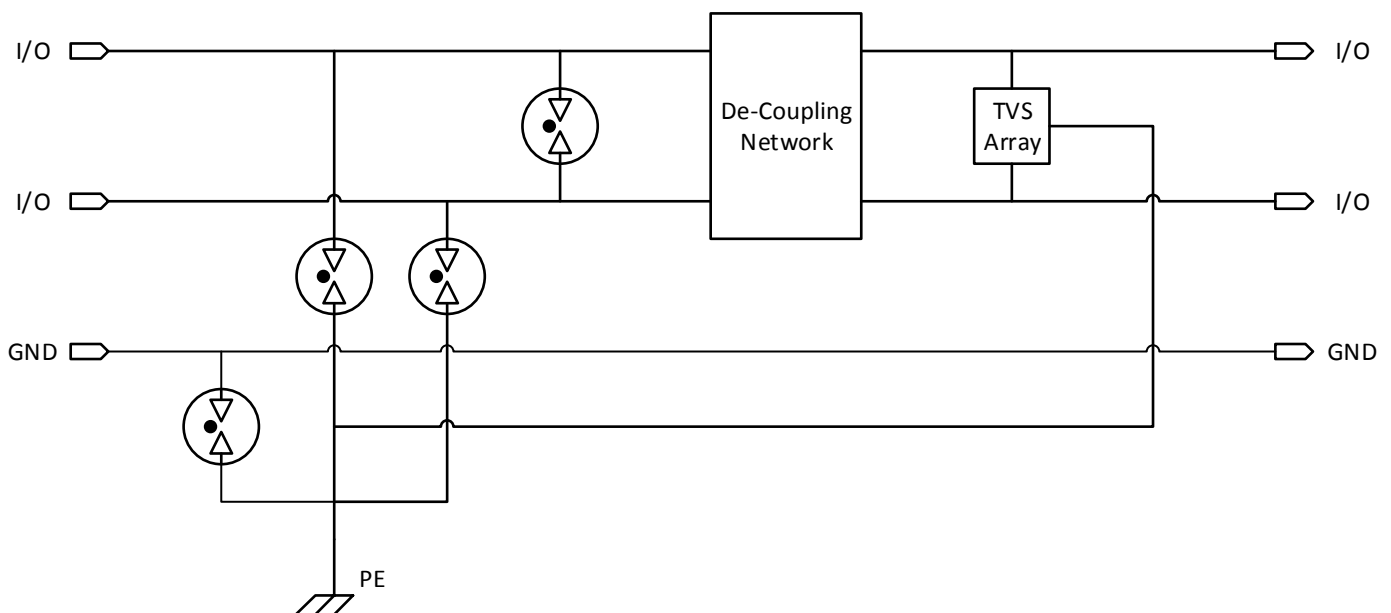


Fig.1 Equivalent Circuit

## DEVICE CHARACTERISTICS

Electrical Characteristics			
Parameter	Symbol	Value	Units
Max Discharge Current (8/20us)	$I_{PP}$	5	KA
Maximum Operation DC Voltage	$V_{RWM}$	15	VDC
Maximum Operation DC Current	$I_{DC}$	300	mA
Power Dissipation @ 300mA	$P_D$	1	W
Common Mode Protection Level (10/700us)	$V_{CMP}$	10	KV
Differential Mode Protection Level (10/700us)	$V_{DMP}$	10	KV
Common Mode Clamping Voltage	$V_{CCM}$	30	V
Differential Mode Clamping Voltage	$V_{CDM}$	30	V
Operation Temperature	$T_J$	-40~85	°C
Response Time	-	5	ns

## Transfer Characteristics

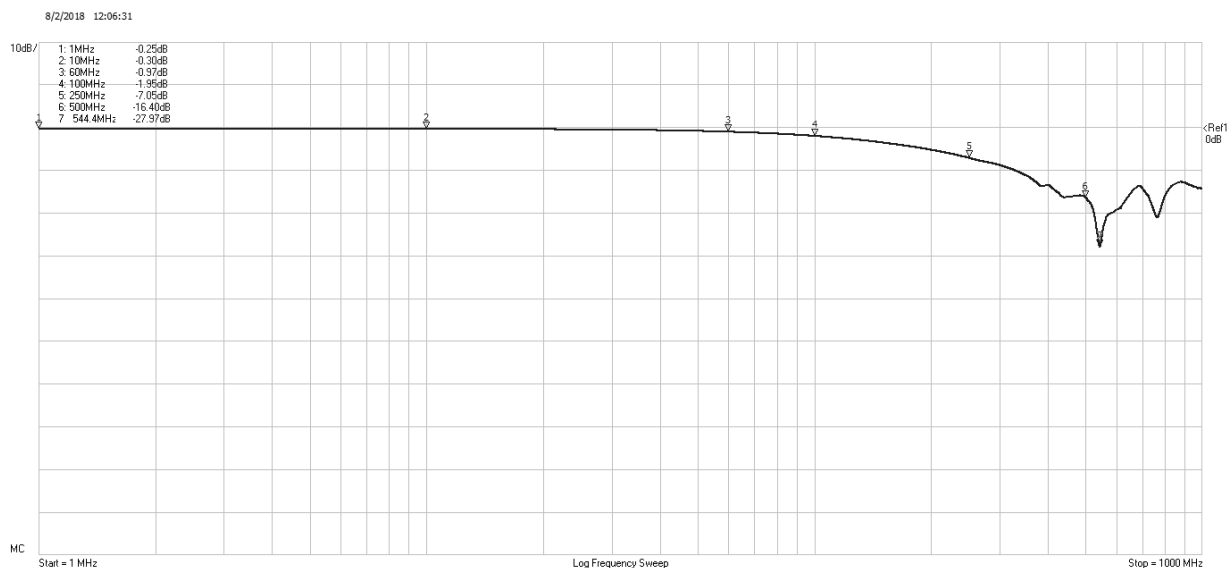
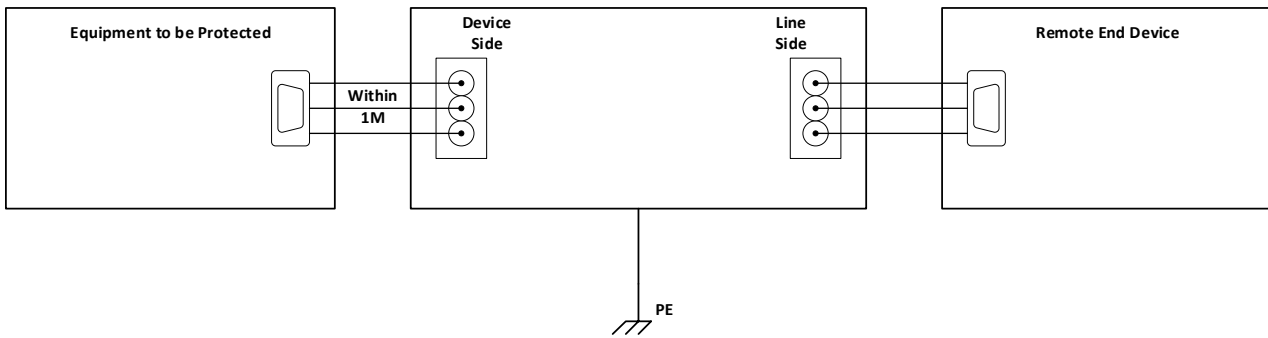


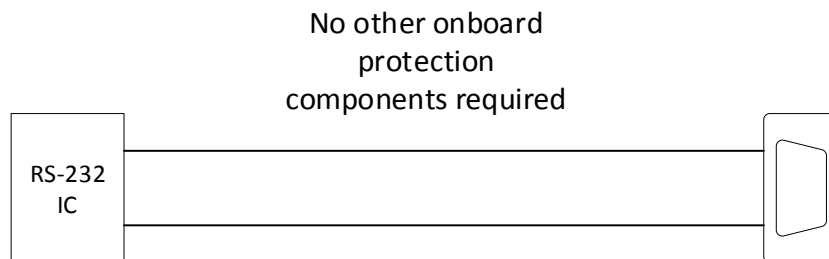
Fig.2 Insertion Loss

**TYPICAL APPLICATION**



*Fig.3 Typical Application*

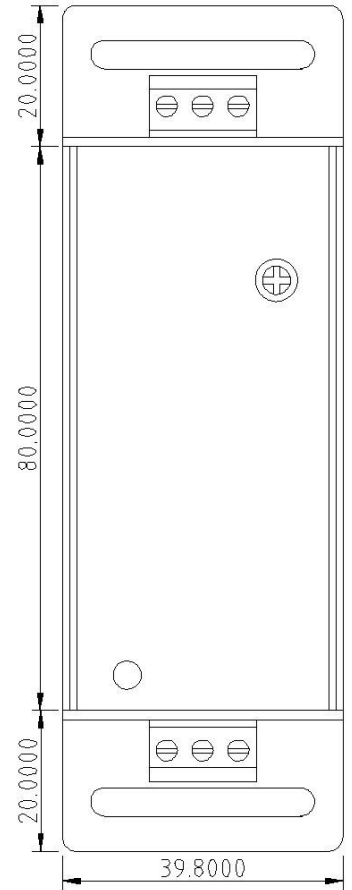
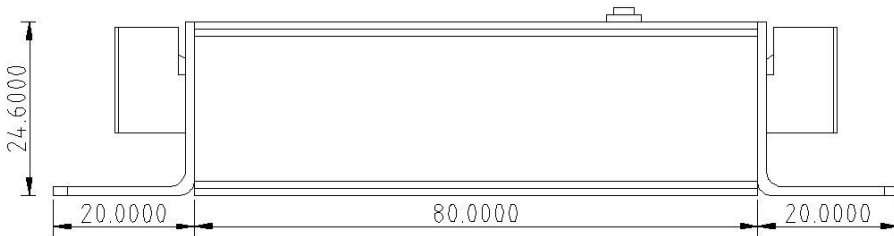
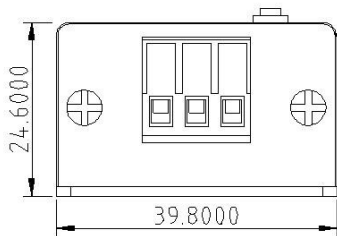
**ONBOARD CONFIGURATION**



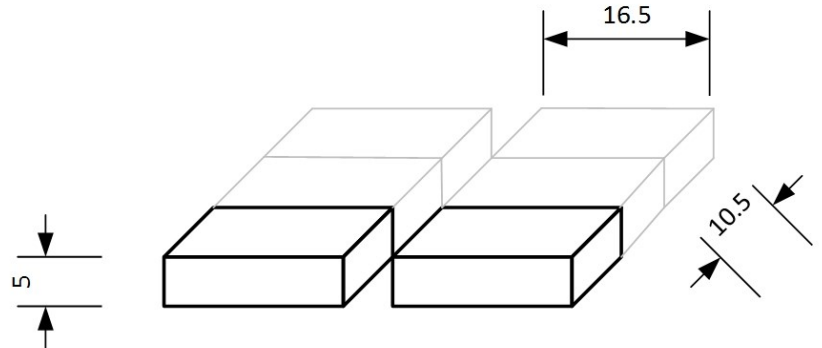
*Fig.4 Recommend onboard Configuration*

**DEVICE OUTLINE**

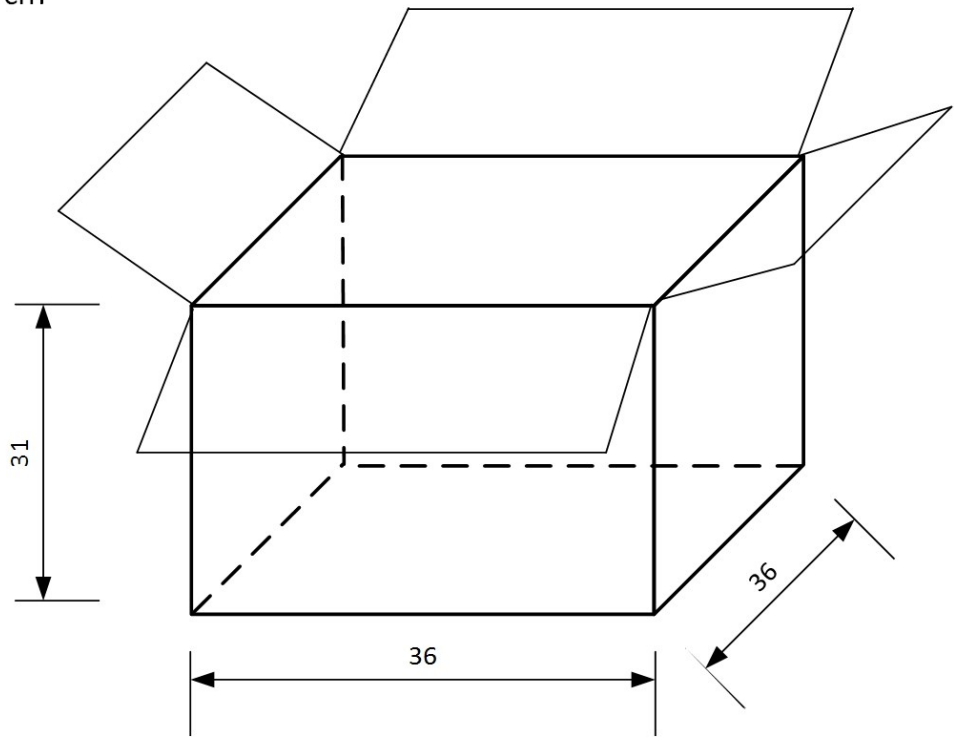
*Dimension : mm*



**PACKING**



Inner Box : 16.5 x 10.5 x 5 cm  
 Carton : 36 x 36 x 31 cm  
 Qty : 36 PCS/Carton



Revision History	Modification Description
Rev.1.0	Initial Release