

I/O SURGE PROTECTION DEVICE

General Description

PD05-P3E 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

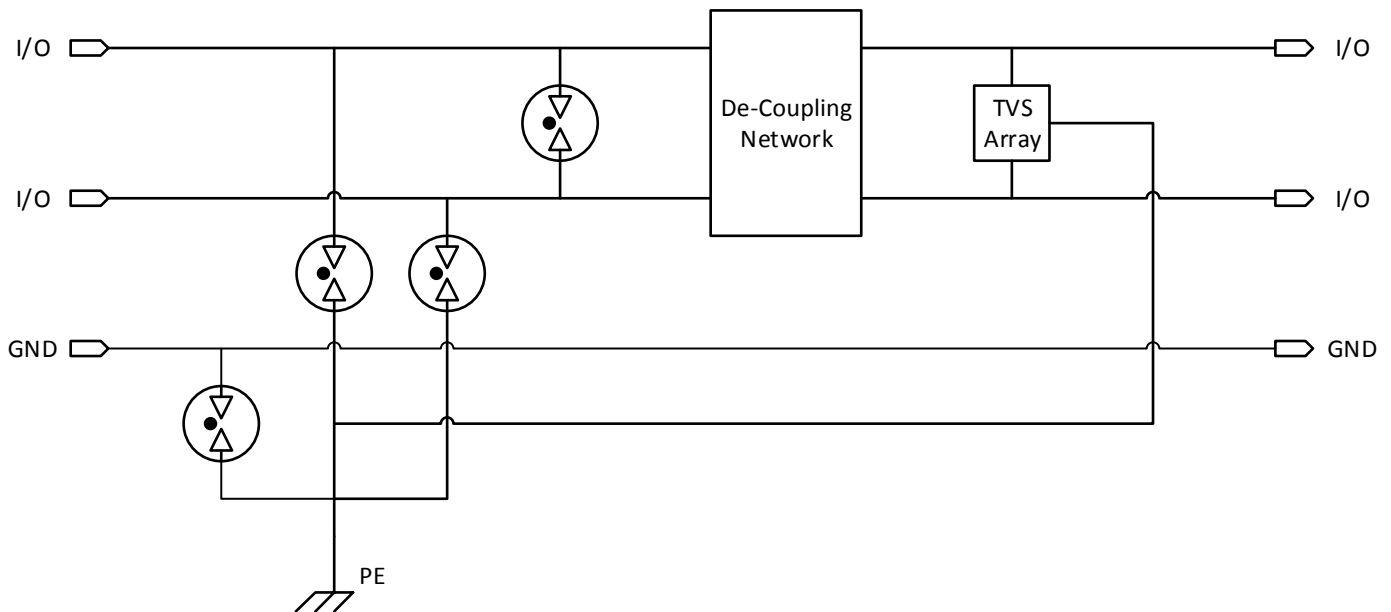


Fig.1 Equivalent Circuit

DEVICE CHARACTERISTICS

Electrical Characteristics			
Parameter	Symbol	Value	Units
Max Discharge Current (8/20us)	I_{PP}	2	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}	6	KV
Differential Mode Protection Level (10/700us)	V_{DMP}	6	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

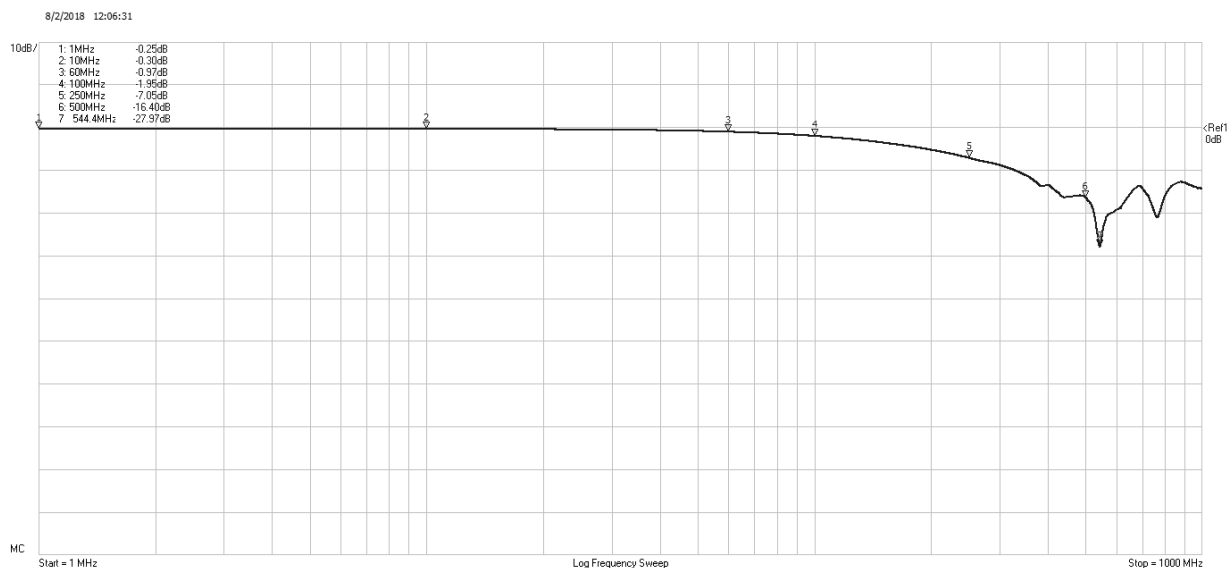


Fig.2 Insertion Loss

TYPICAL APPLICATION

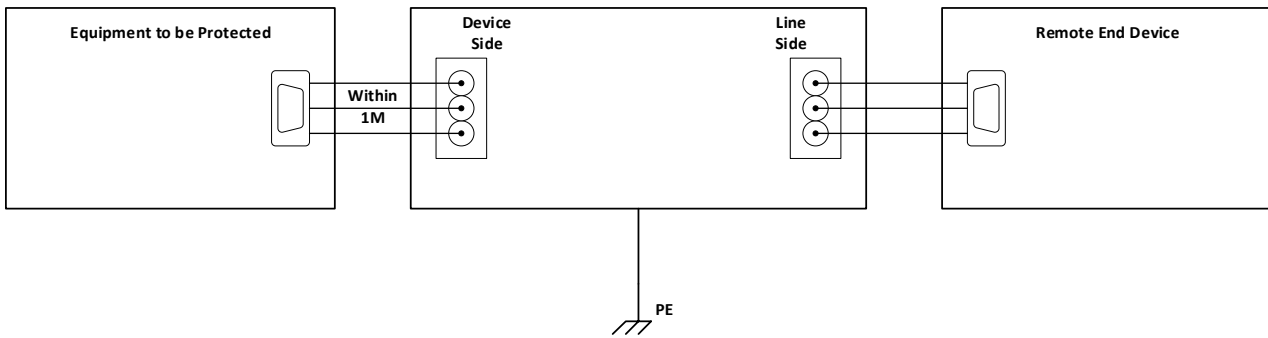


Fig.3 Typical Application

ONBOARD CONFIGURATION

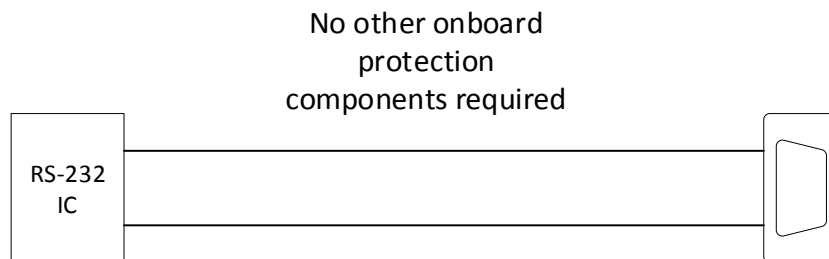
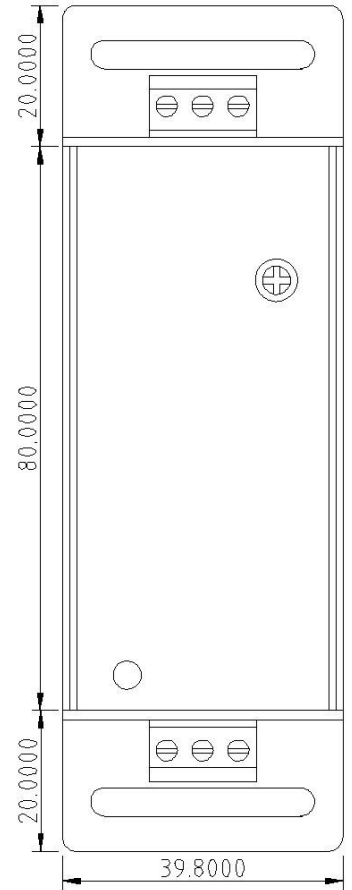
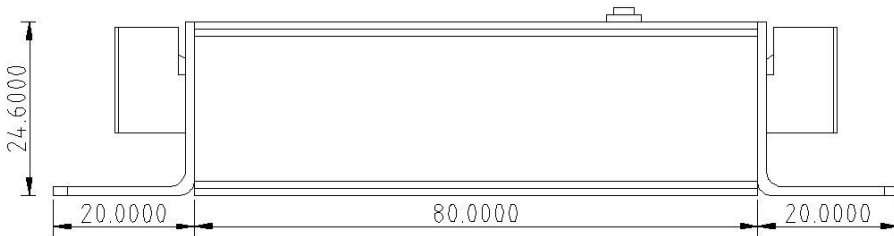
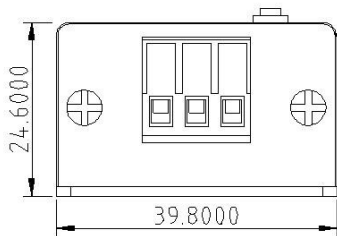


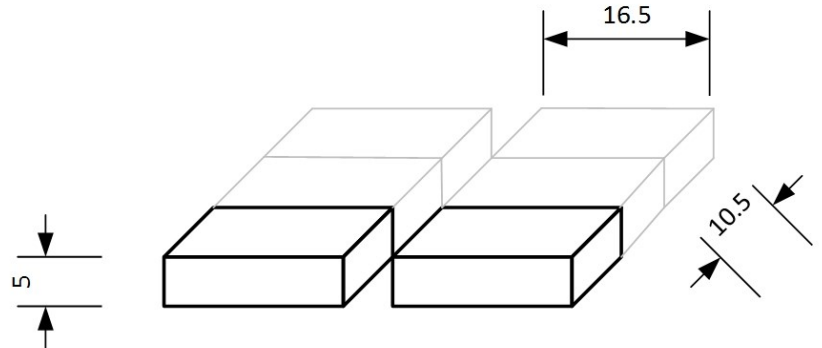
Fig.4 Recommend onboard Configuration

DEVICE OUTLINE

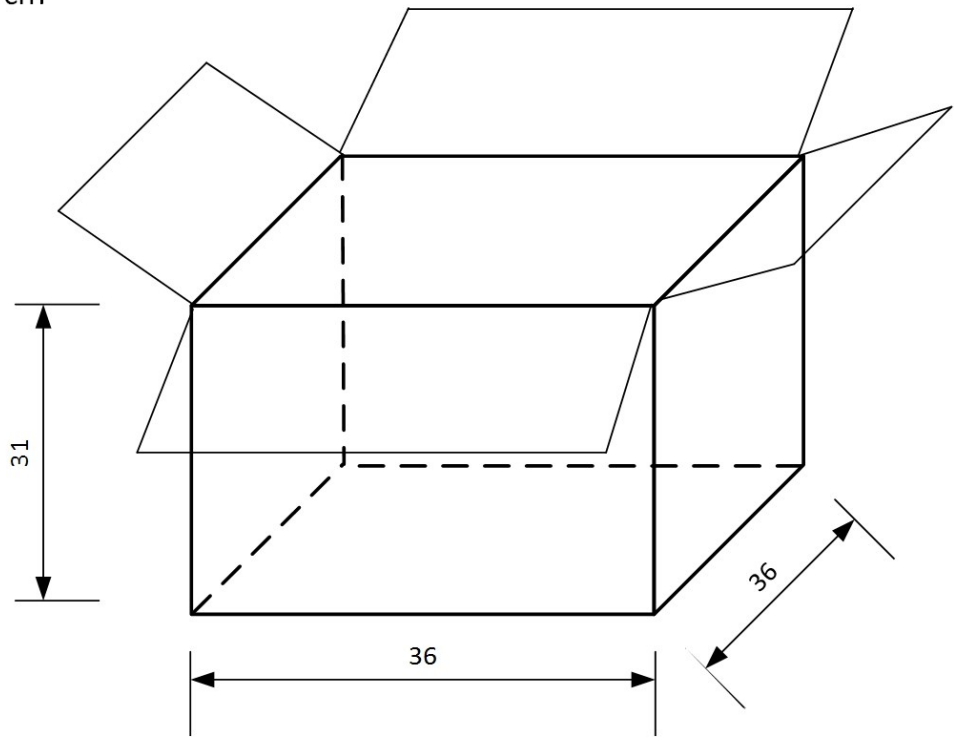
Dimension : mm



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