
DC SURGE PROTECTION DEVICE

General Description

PD01-XXV-LC series is a surge protection device designed for long-range DC applications, especially for equipment powered by high-power industrial DC supplies. Featuring ultra-low clamping technology, it provides overcurrent and overtemperature protection to help ensure safe and reliable operation of connected equipment.

Features

- ◆ Protect DC Line
- ◆ Over Voltage Protection
- ◆ Over Current Protection
- ◆ Over Temperature Protection
- ◆ Operation Indicator (Green)
- ◆ IEC 61000-4-5
- ◆ IEC 61643-41
- ◆ ITU-T K.21

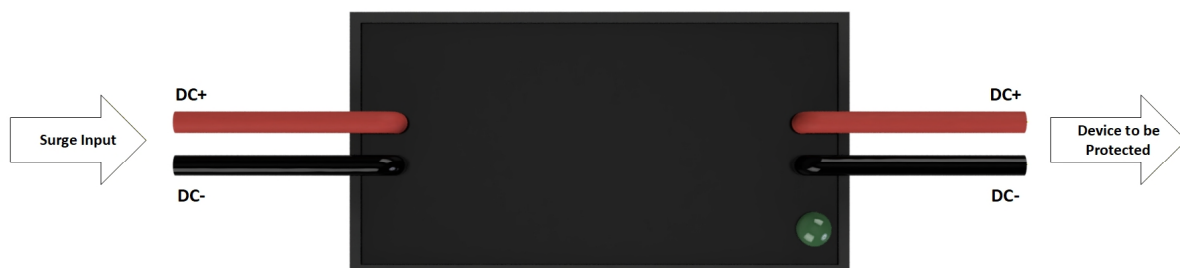


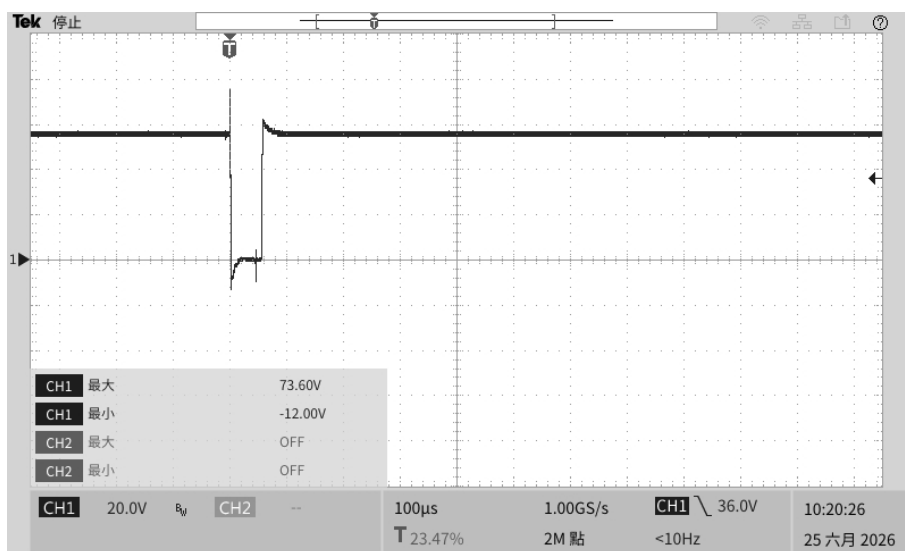
Fig.1 Appearance

DEVICE CHARACTERISTICS

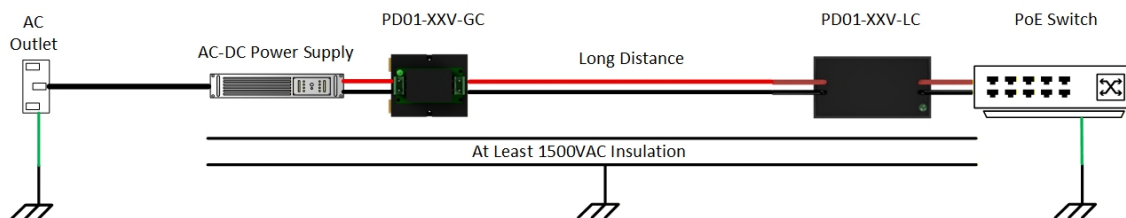
Electrical Characteristics			
Parameter	Symbol	Value	Unit
Max Discharge Current ^{Note (1)}	I_{NMAX}	5	KA
Nominal Common Mode Discharge Current	I_{NCM}	-	KA
Nominal Differential Mode Discharge Current	I_{NDM}	3	KA
Maximum Operation DC Voltage	V_{DC}	60	VDC
Maximum Operation DC Current	I_{DC}	8	A
Common Mode Protection Level ^{Note (2)}	V_{PCM}	-	KV
Differential Mode Protection Level ^{Note (3)}	V_{PDM}	10	KV
Common Mode Clamping Voltage	V_{CCM}	-	V
Differential Mode Clamping Voltage	V_{CDM}	75	V
Voltage Drop ^{Note (4)}	V_{DR}	0.4	V
Power Dissipation ^{Note (5)}	P_D	3.2	W
Response Time	-	1	ns
Operation Temperature	T_J	-40 ~ 85	°C
Note: (1) Measured at 8/20us current wave (2) Measured at 1.2/50us combination wave (3) Measured at 1.2/50us combination wave (4) Measured at 8A DC current (5) Measured at 8A DC current			

APPLICATION AND PERFORMANCE

Differential Clamping Waveform

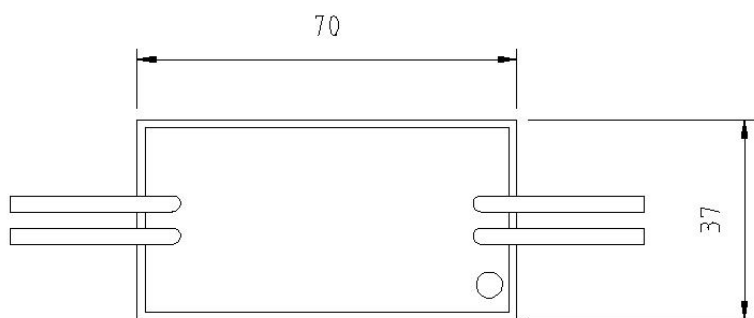
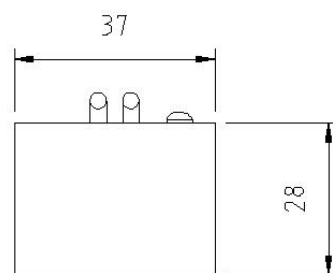
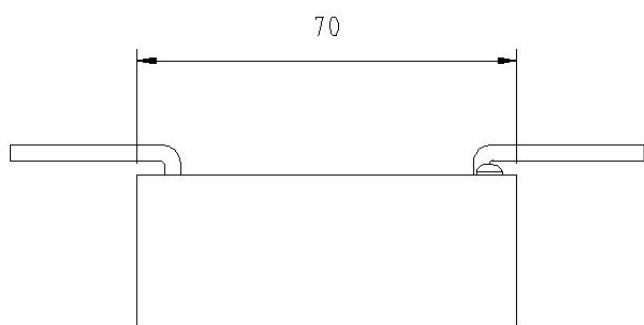


Connection for Effective Protection



DEVICE OUTLINE

Dimension : mm



Revision History		Description	
v2.0		Re-organize datasheet layout	