
COAXIAL SURGE PROTECTION DEVICE

General Description

PD02-SDI is a surge protection device designed to protect signal and power lines against damage caused by surge impulses. The product is suitable for coaxial applications and features a built-in failure indicator that activates when the protection component reaches the end of its service life.

Features

- ◆ No Grounding Requirement
- ◆ Support CATV/AHD/CVI/TVI/HD-SDI
- ◆ PoC (Power over Coaxial)
- ◆ Protect Differential Mode
- ◆ Failure Indicator (Red)
- ◆ IEC 61000-4-5
- ◆ IEC 61643-21

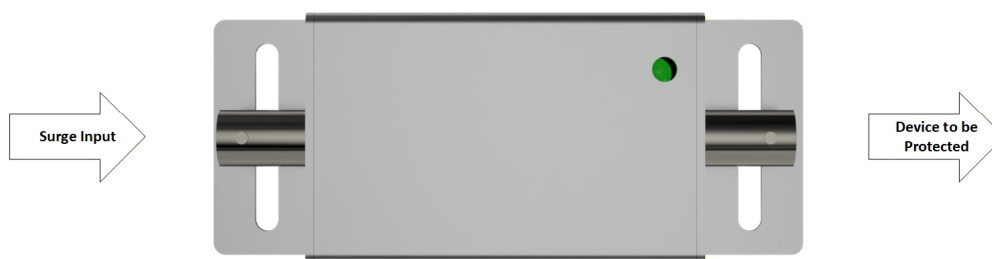


Fig.1 Appearance

DEVICE CHARACTERISTICS

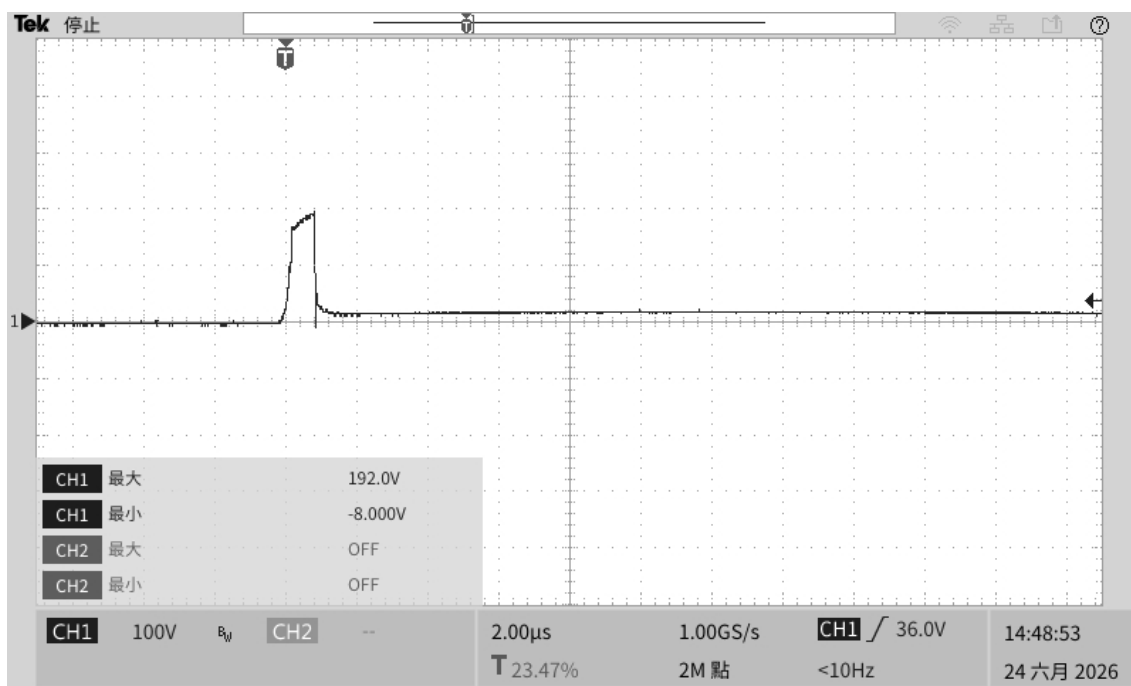
Electrical Characteristics			
Parameter	Symbol	Value	Unit
Max Discharge Current ^{Note (1)}	I_{NMAX}	5	KA
Nominal Common Mode Discharge Current	I_{NCM}	-	KA
Nominal Differential Mode Discharge Current	I_{NDM}	3	KA
Maximum Operation DC Voltage	V_{DC}	76	VDC
Maximum Operation DC Current	I_{DC}	1	A
Common Mode Protection Level	V_{PCM}	-	KV
Differential Mode Protection Level ^{Note (2)}	V_{PDM}	10	KV
Common Mode Clamping Voltage	V_{CCM}	-	V
Differential Mode Clamping Voltage	V_{CDM}	250	V
Data Rate	-	1485	Mbps
Insertion Loss ^{Note (3)}	$IL_{(Max)}$	3	dB
Support Cable Length ^{Note (4)}	CL	200	Meter
Power Dissipation ^{Note (5)}	P_D	0.5	W
Response Time	-	5	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 1GHz frequency (4) Evaluated by RG6-5C2V cable (5) Measured at 500mA DC current			

PERFORMANCE DEMONSTRATION

Transfer Characteristic

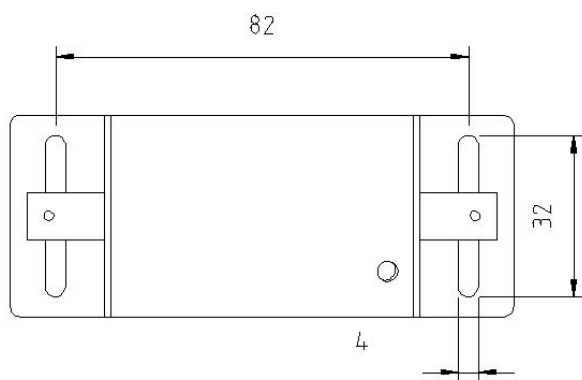
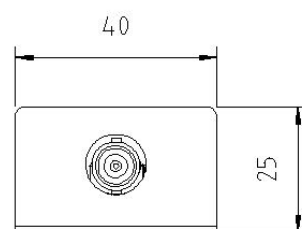
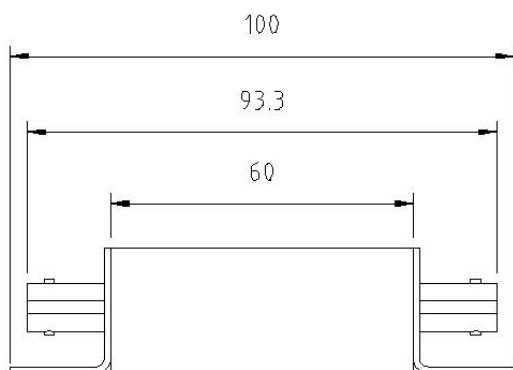


Differential Clamping Waveform



DEVICE OUTLINE

Dimension : mm



Revision History	Description
v2.0	Re-organize datasheet layout