



## 1. GENERAL APPLICATIONS

- 1.1 The protector is for protecting your valued equipment from surges, transients, lightning impulses coupled into power system via direct or indirect strikes, an on/off or a short circuit in the transmission lines, induced or coupled into a DC voltage system, providing the safety of your personnel, communication equipment, computers and any other electronic equipment e.g. solar power system and etc.
- 1.2 The protector is able to protect Transient ( also called " Surge " ) such as an impulse of 8/20  $\mu$ Sec. waveform.
- 1.3 Metal Oxide Varistor ( MOV ), surge protecting component, is manufactured by TDK ( formerly named SIEMENS ) with the approval of UL1449.
- 1.4 The protector housing is made of nonflammable class material in according with UL94V-0 standard and DIN rail 35 mm. mountable.
- 1.5 The protector is plug in module unit with base element type for easy installation and replacement.
- 1.6 The protector is designed, manufactured and tested according to the standard of IEC 61643-31 and EN 50539.

## 2N1D-V series

SURGE PROTECTOR FOR SOLAR PV



## 2. TECHNICAL DATA



Descriptions	2N1D600V	2N1D800V	2N1D1KV	2N1D1K5V
2.1 Nominal operating voltage	600 Vdc	800 Vdc	1000 Vdc	1500 Vdc
2.2 Max. operating voltage (Uc)	700 Vdc	900 Vdc	1100 Vdc	1600 Vdc
2.3 Response time	< 25 nSec			
2.4 Operating temperature	-20 °C to + 85 °C			
2.5 DC load current	Independent ( Un-limited )			
2.6 Nominal discharge current (In) ( at 8/20 $\mu$ Sec. )	3 kA			
2.7 Max. discharge current (Imax) ( at 8/20 $\mu$ Sec. )	10 kA			
2.8 Residual voltage (Ures) ( Differential mode 6 kV / 3 kA ) ( Common mode 6 kV / 3 kA )	< 3.8 kV < 2.1 kV	< 4.0 kV < 2.3 kV	< 4.2 kV < 2.5 kV	< 5.0 kV < 2.8 kV
2.9 Protection mode	All modes ( [+]-G , [-]-G , [+]-[-] )			
2.10 Status display	Normal or Fault indicator			
2.11 Housing material	UL94V-0 standard			
2.12 Mounting	DIN rail 35 mm.			
2.13 Connection type	Screw terminal			
2.14 Dimension ( W x L x H )	Approx. 100 x 37 x 70 mm.			
2.15 Weight	Approx. 300 grams			
2.16 Standard according	IEC 61643-31 and EN 50539			

## 3. OPTIONS

3.1	IC1 = Indoor Cabinet	IP1 = Indoor Plate	ID1 = on DIN RAIL	OC1 = Outdoor Cabinet
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