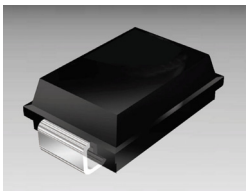
Description

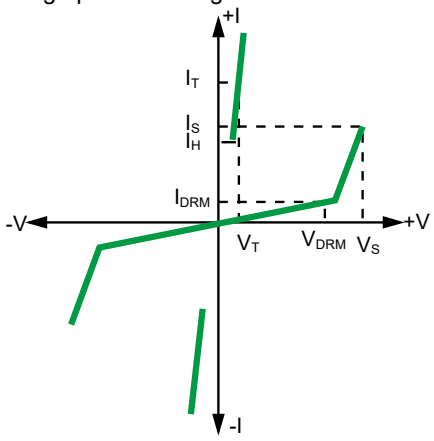
Prisemi POVxxxxSA (SMA) protects central office accesses and customer premise equipments against overvoltage on communication line. Such as CCD and DVR vedio line, modems, line cards, fax machines, and other CPE. The devices are used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA-968 (formerly known as FCC Part 68).



Feature

Compared to surge suppression using other technologies, POVxxxxSA offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt).

- Cannot be damaged by voltage
- Eliminate hysteresis and heat dissipation typically found with clamping devices
- Eliminate voltage overshoot caused by fast-rising transients
- Are non-degenerative
- Will not fatigue
- Have low capacitance, making them ideal for high-speed transmission equipment



Electrical Parameters

Part Number	V_{DRM} (V)	V_S (V)	V_T (V)	I_{DRM} (μA)	I_S (mA)	I_T (A)	I_H (mA)	C (pF)
POV0080SA	6	25	4	5	800	2.2	80	60
POV0300SA	25	40	4	5	800	2.2	80	60
POV0640SA	58	77	4	5	800	2.2	150	60
POV0720SA	65	88	4	5	800	2.2	150	60
POV0900SA	75	98	4	5	800	2.2	150	55
POV1100SA	90	130	4	5	800	2.2	150	55
POV1300SA	120	160	4	5	800	2.2	150	55
POV1500SA	140	180	4	5	800	2.2	150	55
POV1800SA	170	220	4	5	800	2.2	150	50
POV2300SA	190	260	4	5	800	2.2	150	50
POV2600SA	220	300	4	5	800	2.2	150	45
POV3100SA	275	350	4	5	800	2.2	150	45
POV3500SA	320	400	4	5	800	2.2	150	40

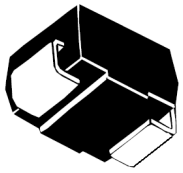
Notes： ALL measurements are made at an ambient temperature of 25℃.Ipp applies to -40℃ through +85℃ temperature range.

V_{DRM} is measured at I_{DRM} .
V_S is measured at 100V/μs .
Off-state capacitance is measured at 1MHz with a 2V bias .

Surge Ratings

Series	I_{PP} 2x10 μs Amps	I_{PP} 8x20 μs Amps	I_{PP} 10x160 μs Amps	I_{PP} 10x560 μs Amps	I_{PP} 10x1000 μs Amps	I_{TSM} 60 Hz Amps	di/dt Amps/μs
A	150	150	90	50	45	20	500

Thermal Considerations

Package SMA	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature	- 40 to +150	°C
	T_S	Storage Temperature Range	- 65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W

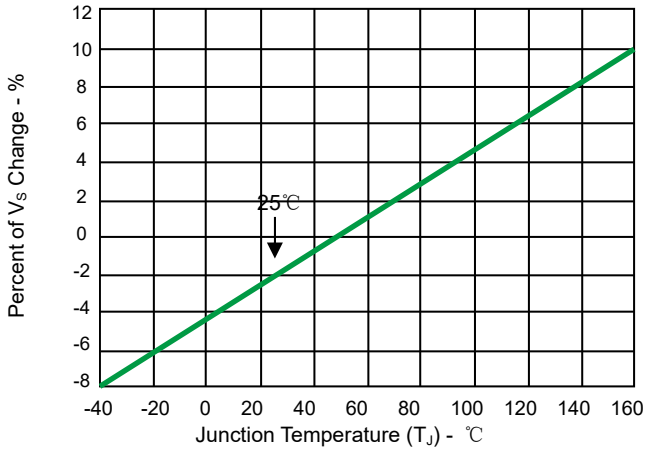


Fig 1.Normalized V_S Change vs. Junction Temperature

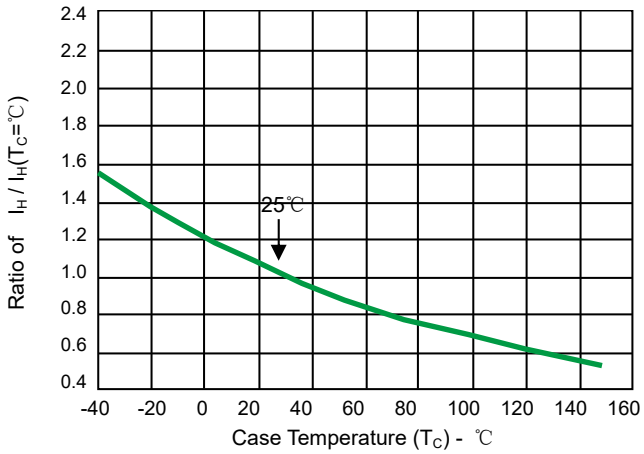


Fig 2. Normalized DC Holding Current versus Case Temperature

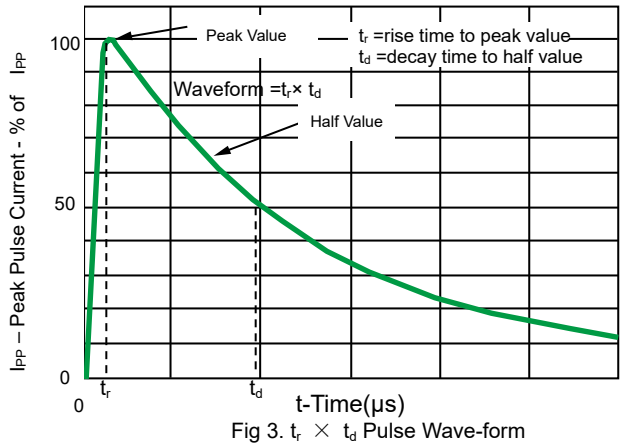
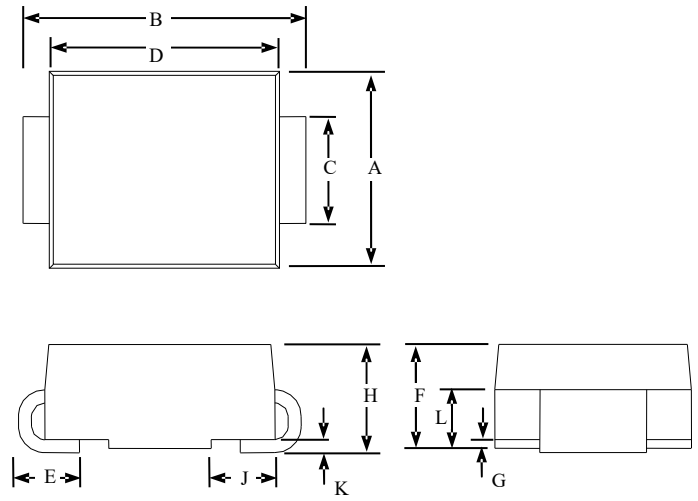


Fig 3. $t_r \times t_d$ Pulse Wave-form

Product dimension(SMA)



DIMENSIONS ARE : INCHES / (Millimeters)

Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.08	0.11	2.1	2.7
B	0.18	0.20	4.7	5.3
C	0.05	0.06	1.2	1.7
D	0.16	0.18	4.0	4.5
E	0.03	0.05	0.9	1.4
F	0.06	0.08	1.7	2.2
G	0.00	0.00	0.0	0.2
H	0.06	0.09	1.7	2.3
J	0.03	0.05	0.8	1.3
K	0.00	0.01	0.2	0.3
L	0.03	0.04	0.9	1.2

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