Prisemi®

POV1826SB

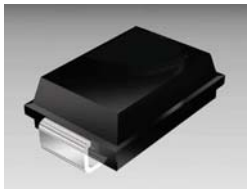
Over-voltage Protection Thyristor

Description

Prisemi POV1826SB protect central office, access and customer premise equipment against overvoltages on the telecom line.

DO-214AA solid state protection devices protect telecommunications equipment such as modems, line cards, fax machines, and other CPE.

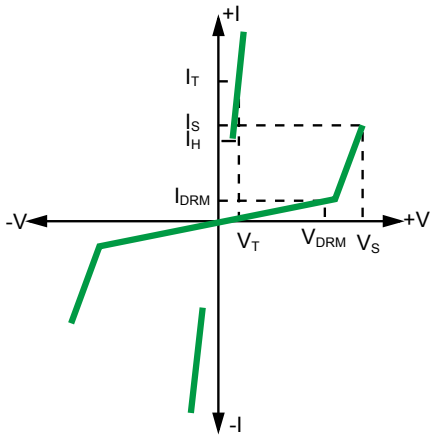
The device is used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA-968 (formerly known as FCC Part 68).



Feature

Compared to surge suppression using other technologies, POV1826SB offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt). POV1826SB:

- 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_O (pF)
POV1826SB	180	260	4	5	800	2.2	150	55

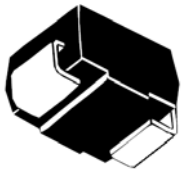
Notes：ALL measurements are made at an ambient temperature of 25℃.Ipp aoolies to -40℃ through +85℃ temperature range.

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
B	250	250	150	100	80	30	500

Thermal Considerations

Package DO-214AA	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature	- 40 to +150	°C
	T_S	Storage Temperature Range	- 65 to +150	°C
	$R_{\theta J A}$	Thermal Resistance: Junction to Ambient	90	°C/W

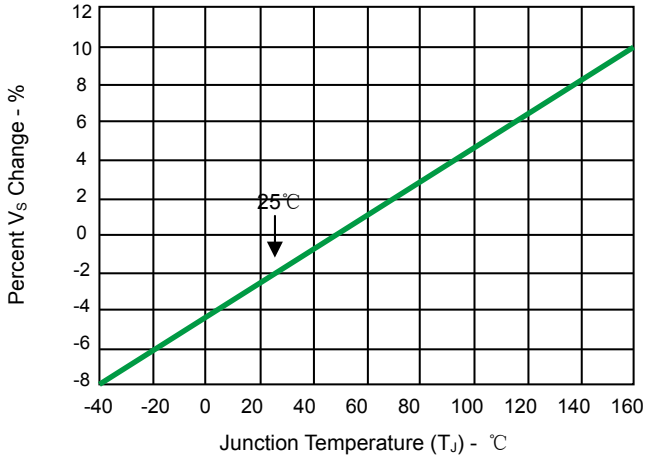


Fig 1.Normalized V_S Change vs. Junction Temperature

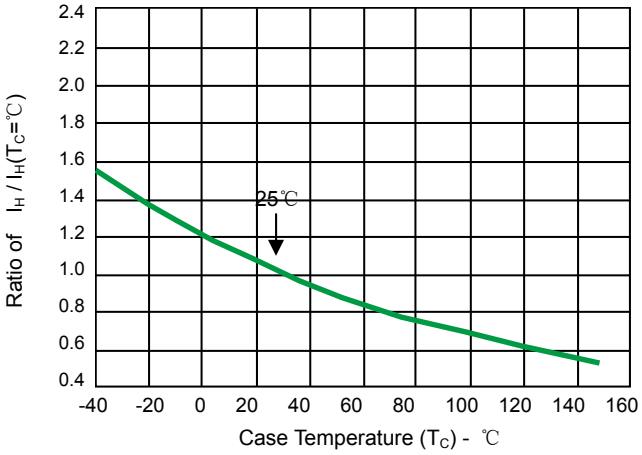


Fig 2. Normalized DC Holding Current versus Case Temperature

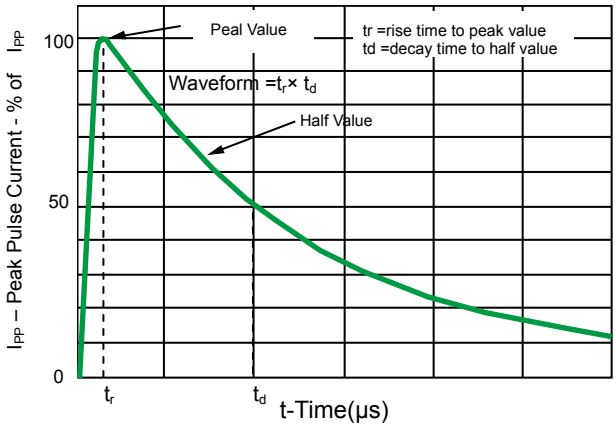
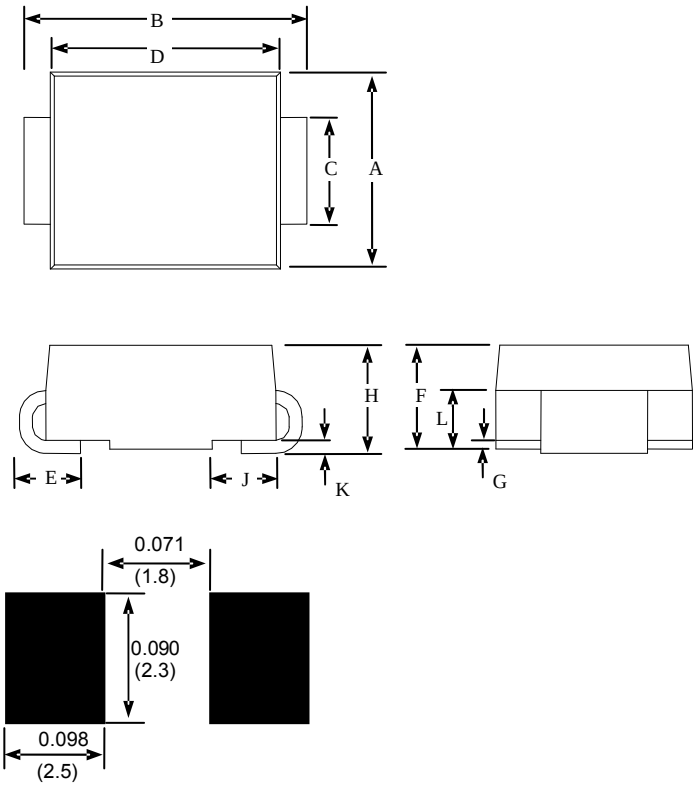


Fig 3. t_r × t_d Pulse Wave-form

Product dimension(SMB)



DIMENSIONS ARE : INCHES / (Millimeters)

Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.134	0.155	3.40	3.94
B	0.205	0.220	5.21	5.59
C	0.075	0.083	1.90	2.11
D	0.166	0.185	4.22	4.70
E	0.036	0.056	0.91	1.42
F	0.073	0.087	1.85	2.10
G	0.002	0.008	0.05	0.20
H	0.077	0.094	1.95	2.40
J	0.043	0.053	1.09	1.35
K	0.008	0.014	0.20	0.35
L	0.039	0.049	0.99	1.24

Ordering information

Device	Package	Shipping
POV1826SB	SMB(Pb-Free)	3000 / Tape & Reel

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