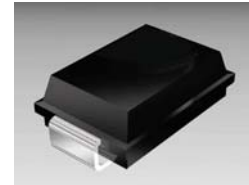


### Description

Prisemi 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.

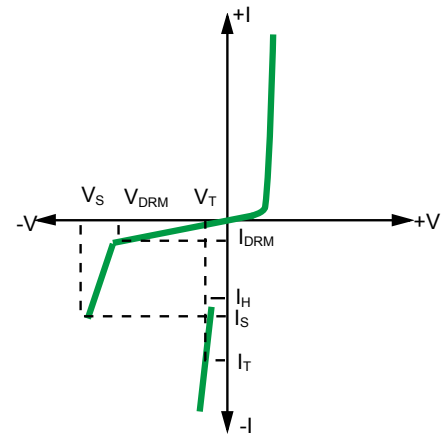
The device is used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA-968 (formerly known as FCC Part 68).



### Feature

Compared to surge suppression using other technologies, POV0641SC offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt). POV0641SC:

- 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 <sub>DRM</sub> (V)	V <sub>S</sub> (V)	V <sub>T</sub> (V)	I <sub>DRM</sub> (μA)	I <sub>S</sub> (mA)	I <sub>T</sub> (A)	I <sub>H</sub> (mA)	C <sub>O</sub> (pF)
POV0641SC	58	68	4	5	800	2.2	80	140

Notes: ALL measurements are made at an ambient temperature of 25°C. I<sub>pp</sub> applies to -40°C through +85°C temperature range.

V<sub>DRM</sub> is measured at I<sub>DRM</sub>.

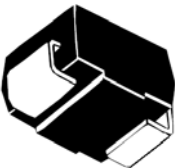
V<sub>S</sub> is measured at 100V/μs.

Off-state capacitance is measured at 1MHz with a 2V bias.

### Surge Ratings

Series	I <sub>PP</sub> 2x10 μs Amps	I <sub>PP</sub> 8x20 μs Amps	I <sub>PP</sub> 10x160 μs Amps	I <sub>PP</sub> 10x560 μs Amps	I <sub>PP</sub> 10x1000 μs Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/μs
C	500	400	200	150	100	50	500

Thermal Considerations

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

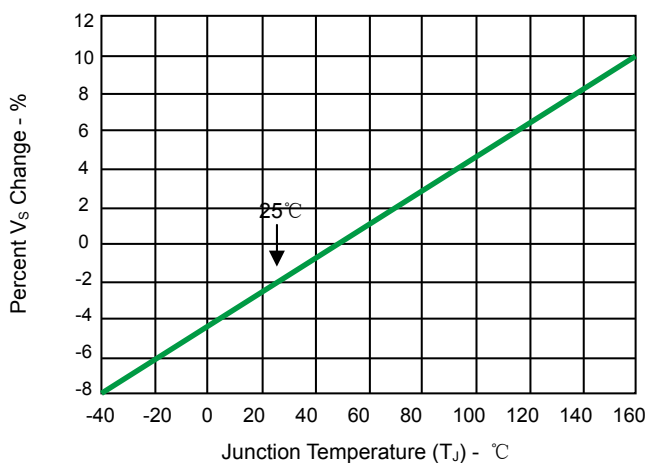


Fig 1. Normalized  $V_S$  Change vs. Junction Temperature

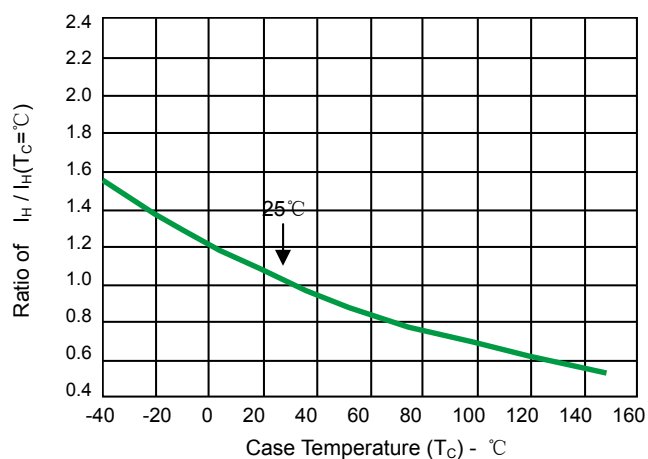


Fig 2. Normalized DC Holding Current versus Case Temperature

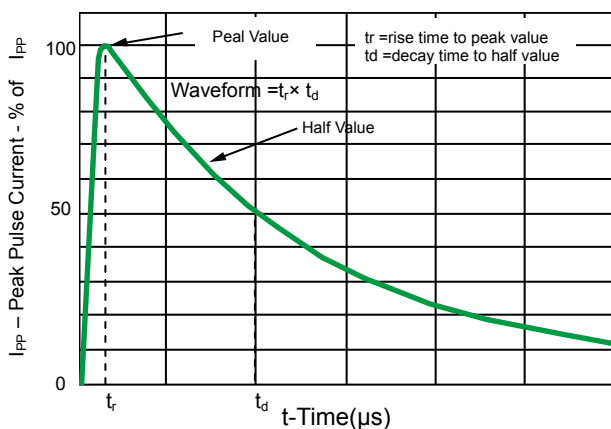
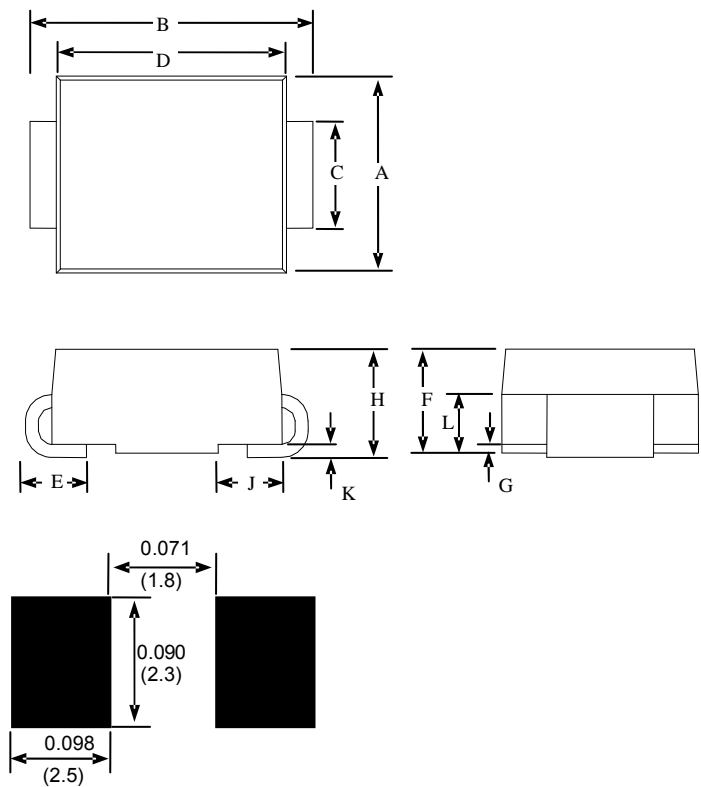


Fig 3.  $t_r \times t_d$  Pulse Wave-form

Product dimension(SMB)




DIMENSIONS ARE :  $\frac{\text{INCHES}}{\text{(Millimeters)}}$

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
POV0641SC	SMB(Pb-Free)	3000 / Tape & Reel


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