

Description

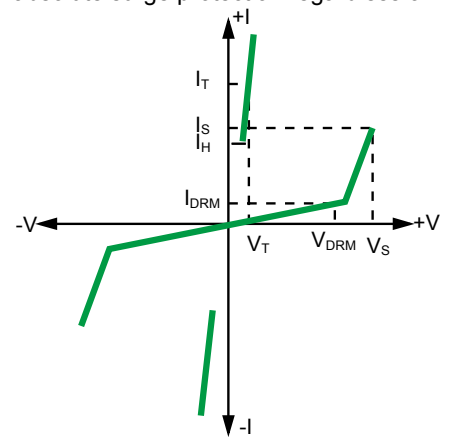
Prisemi PELA5VB02 (DO-214AC/SMA) protects central office accesses and customer premise equipments against overvoltage on communication line. Such as CCD and DVR video line, modems, line cards, fax machines, and other CPE. The devices are used to enable equipment to meet various regulatory requirements 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, PELA5VB02 devices 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

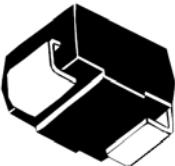
Part Number	V _{DRM} (V)	V _S (V)	V _T (V)	I _{DRM} (μA)	I _S (mA)	I _T (A)	I _H (mA)	C (pF)
PELA5VB02	6	25	4	5	800	2.2	80	60

Notes: ALL measurements are made at an ambient temperature of 25°C. I_{pp} applies to -40°C through +85°C 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

I _{PP} 2x10 μs Amps	I _{PP} 8x20 μs Amps	I _{PP} 10x160 μs Amps	I _{PP} 10x560 μs Amps	V _{PP} 10x700 μs Volts	ESD Level	di/dt Amps/μs
150	150	90	87.5	3500	4	500

Thermal Considerations

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

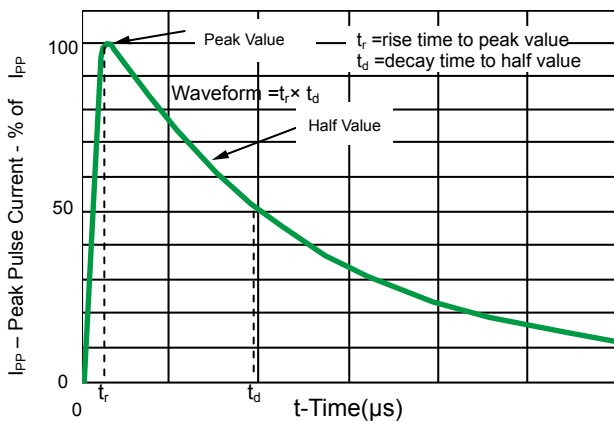
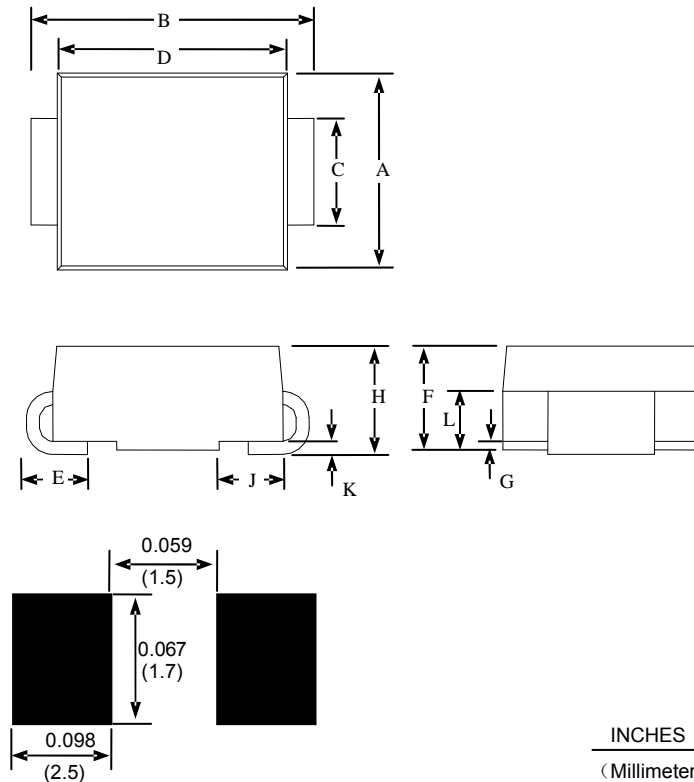


Fig 1. $t_r \times t_d$ Pulse Wave-form

Product dimension(DO-214AC/SMA)




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

Ordering information

Device	Package	Shipping
PELA5VB02	DO-214AC/SMA (Pb-Free)	5000 / Tape & Reel


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