



# SMHN3.3A / SMHN5.0A

## SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 400 Watts

**STAND-OFF VOLTAGE**

**3.3 / 5.0 Volts**

**SOD-123HE**

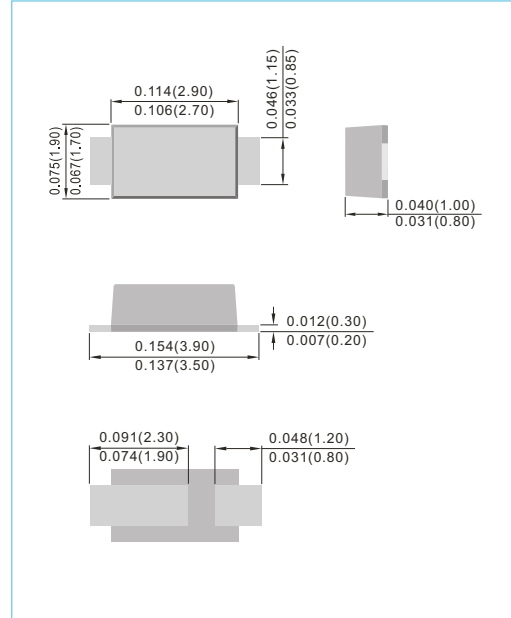
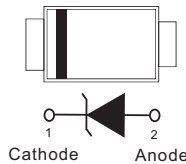
Unit : inch(mm)

### FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Built-in strain relief
- Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOD-123HE
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Apprx.Weight: 0.0006 ounce, 0.0172 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on $T_A = 25^\circ\text{C}$ (Notes 1,2,4, Fig.1)	$P_{PPM}$	400	Watts
Peak Forward Surge Current per Fig.5 (Note 3)	$I_{FSM}$	40	Amps
Peak Pulse Current on 10/1000 $\mu\text{s}$ waveform(Note 1)Fig.2	$I_{PPM}$	see Table 1	Amps
Typical Thermal Resistance Junction to Air (NOTE 2)	$R_{\theta JA}$	107	$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Marking Code
	$V_{RWM}$	$V_{BR} @ I_T$			$I_R @ V_{RWM}$	$V_C @ I_{PP}$	$I_{PP}$	
UNI	V	Min.	Max.	mA	UNI	V	A	UNI
400W Transient Voltage Suppressor								
SMHN3.3A	3.3	5.32	5.88	100	500	7.5	55	HDA
SMHN5.0A	5	6.4	7.25	100	200	9.2	43.5	HEA

### NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above  $T_A = 25^\circ\text{C}$  per Fig. 2.
2. Mounted on 5.0mm<sup>2</sup> copper pads to each terminal.
3. 8.3ms single half sine-wave, or equivalent square wave, duty cycle = 4 pulses per minutes maximum.
4. Peak pulse power waveform is 10/1000 $\mu\text{s}$ .



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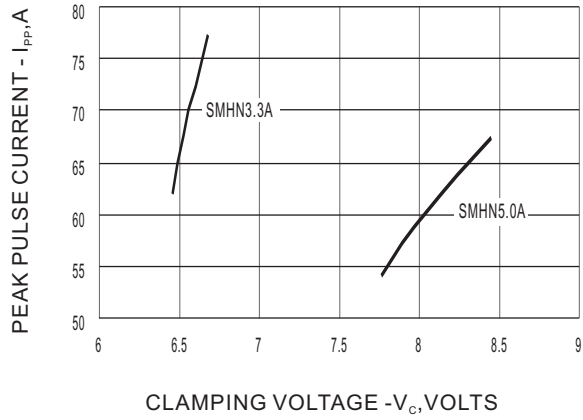


Fig.1 TYPICAL CLAMPING VOLTAGE AT PEAK PULSE CURRENT(10/1000 $\mu$ s)

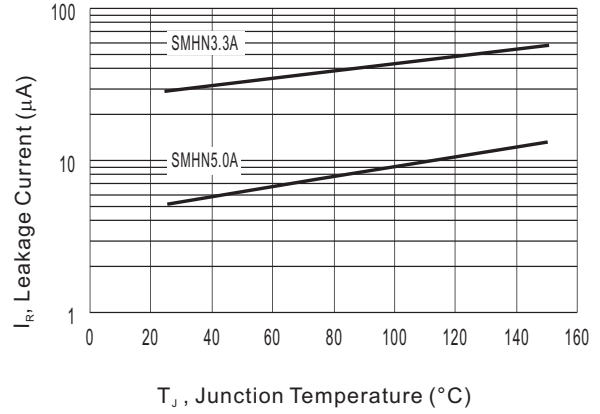


Fig 2. Typical Reverse Characteristics

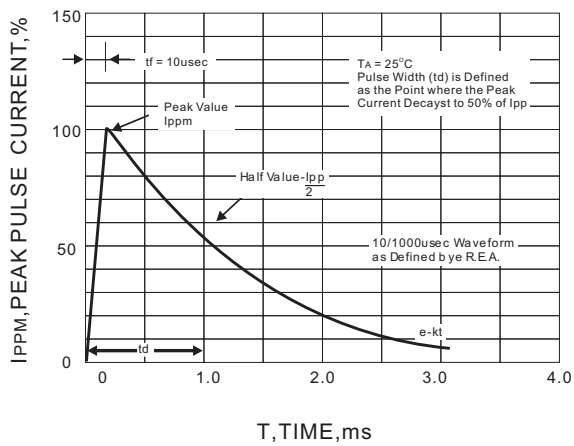
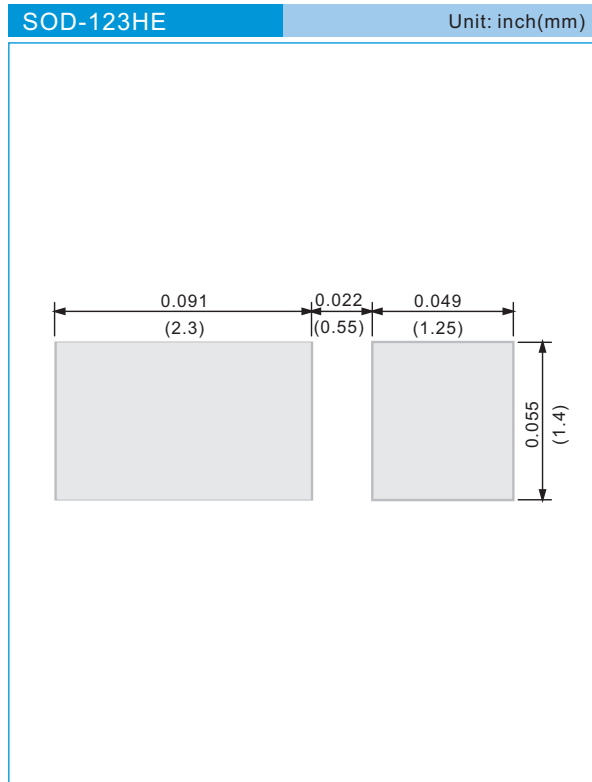


Fig.3 PULSE WAVEFORM



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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

### LEGAL STATEMENT

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