

# BAV16W

## SURFACE MOUNT SWITCHING DIODES

**Voltage**

**100 V**

**Power**

**350 mW**

**SOD-123**

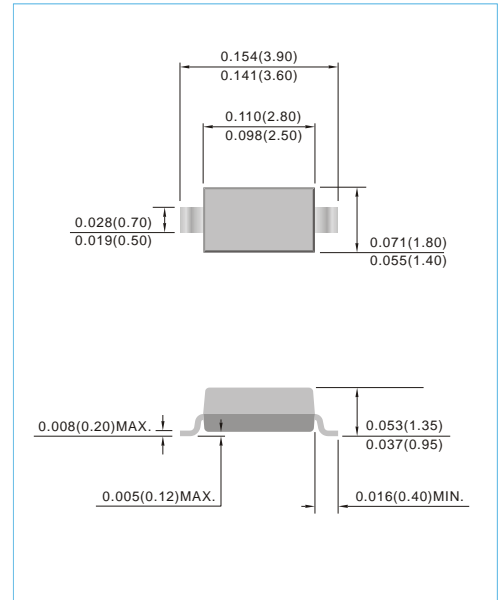
Unit : inch(mm)

### Features

- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: SOD-123 plastic case
- Terminals: Solderable per MIL-STD-750, Method 2026
- Standard packaging: 8mm tape
- Approx. Weight: 0.00037 ounces, 0.0104 grams
- Marking: A6



Cathode Anode

### Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Reverse voltage	$V_R$	75	V
Peak reverse voltage	$V_{RM}$	100	V
RMS voltage	$V_{RMS}$	50	V
Maximum DC blocking voltage	$V_{DC}$	75	V
Maximum average forward current at $T_A = 25^\circ\text{C}$	$I_{AV}$	150	mA
Peak forward surge current : $1\mu\text{s}$	$I_{FSM}$	4	A
Power dissipation derate above $25^\circ\text{C}$	$P_{TOT}$	350	mW
Maximum forward voltage	$V_F$	0.855 / 0.01A	V
Maximum dc reverse current at rated dc blocking voltage $T_J = 25^\circ\text{C}$	$I_R$	1 @ 75V	$\mu\text{A}$
Junction capacitance (Notes 1)	$C_J$	2	pF
Maximum reverse recovery (Notes 2)	$T_{RR}$	6	ns
Typical thermal resistance	$R_{\theta JA}$	450	$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150	$^\circ\text{C}$

Note : 1.  $C_J$  at  $V_R=0, f=1\text{MHz}$

2. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{V}$ ,  $R_L=100\Omega$

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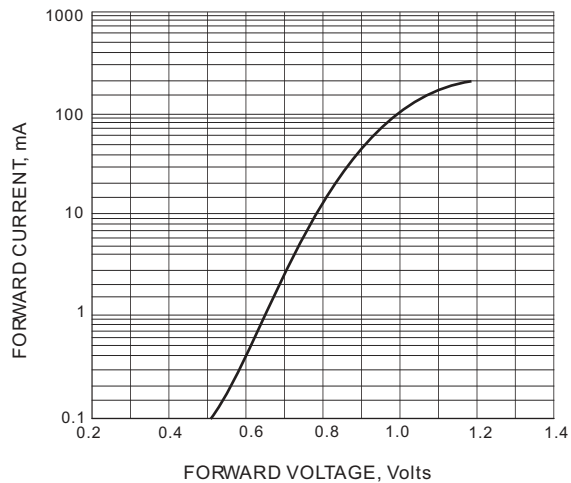


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

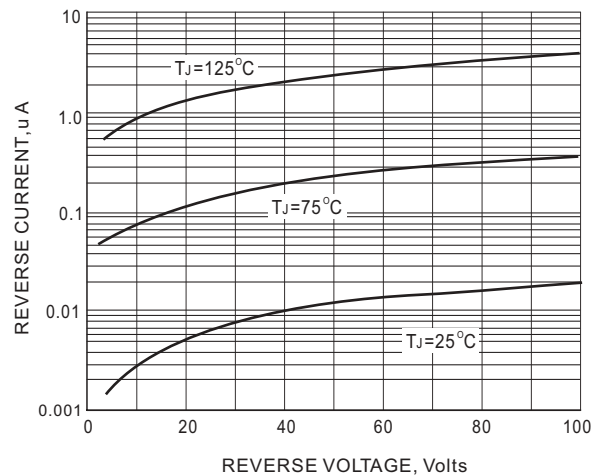


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

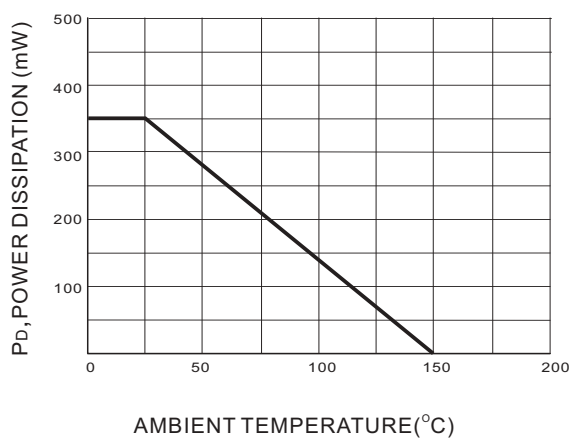


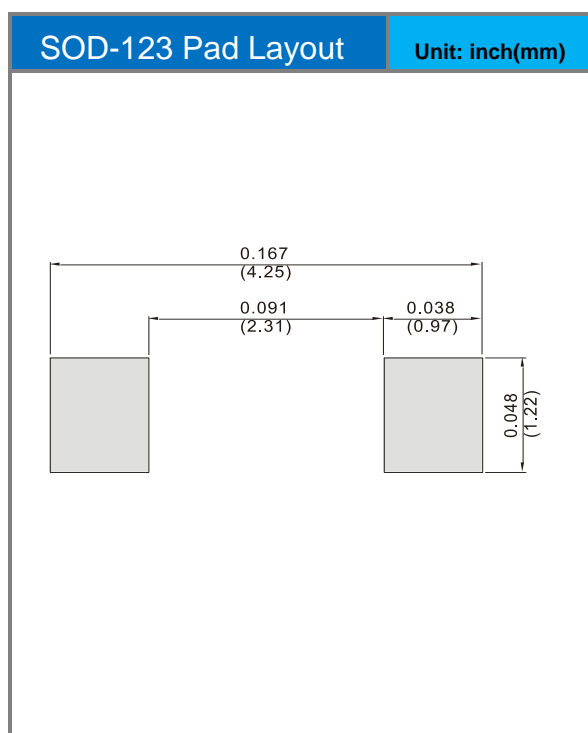
FIG. 3 POWER DERATING CURVE

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAV16W	SOD-123	3K pcs / 7" reel	A6
BAV16W	SOD-123	10K pcs / 13" reel	A6

## Mounting Pad Layout



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