



# BAV19WS~BAV21WS

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 120-250 Volts      **POWER** 200mWatts

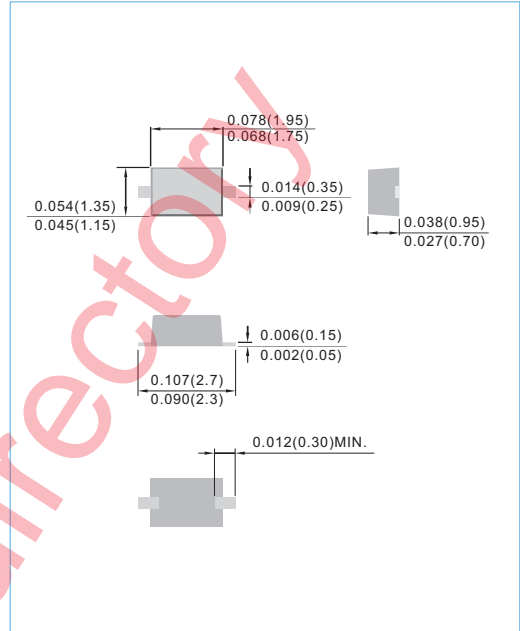
**SOD-323**      Unit : inch(mm)

### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

### MECHANICAL DATA

Case: SOD-323, Plastic  
 Terminals: Solderable per MIL-STD-750, Method 2026  
 Approx. Weight: 0.00014 ounces, 0.0041 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

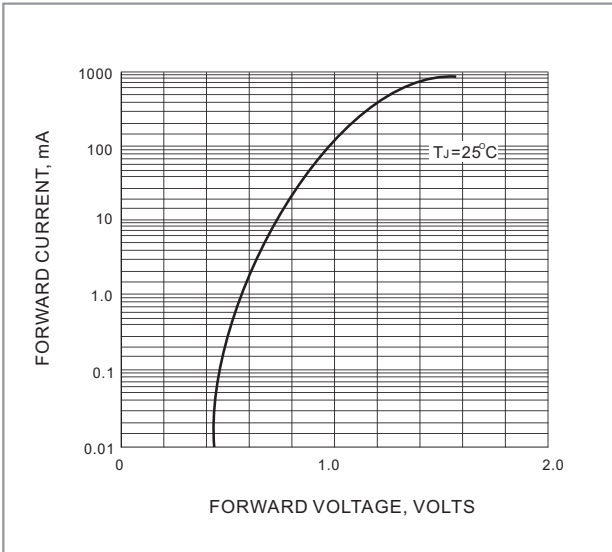
PARAMETER	SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Marking Code		A8	A80	A82	
Reverse Voltage	V <sub>R</sub>	100	150	200	V
Peak Reverse Voltage	V <sub>RM</sub>	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f ≥50 Hz	I <sub>O</sub>		200		mA
Peak Forward Surge Current, 0.001ms	I <sub>FSM</sub>		4		A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>		200		mW
Maximum Forward Voltage at 0.1A	V <sub>F</sub>		1.0		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C	I <sub>R</sub>		0.1		μA
Typical Junction Capacitance (Notes1)	C <sub>J</sub>		5.0		pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>		50		ns
Maximum Thermal Resistance	R <sub>θJA</sub>		640		°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>		-55 to +150		°C

**NOTE:**

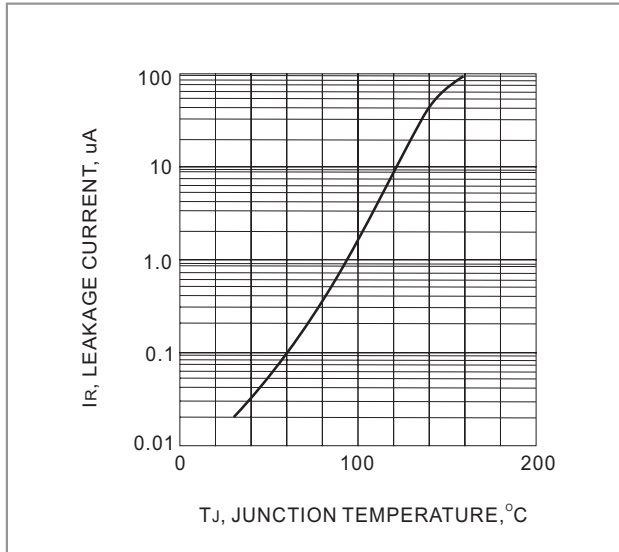
1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



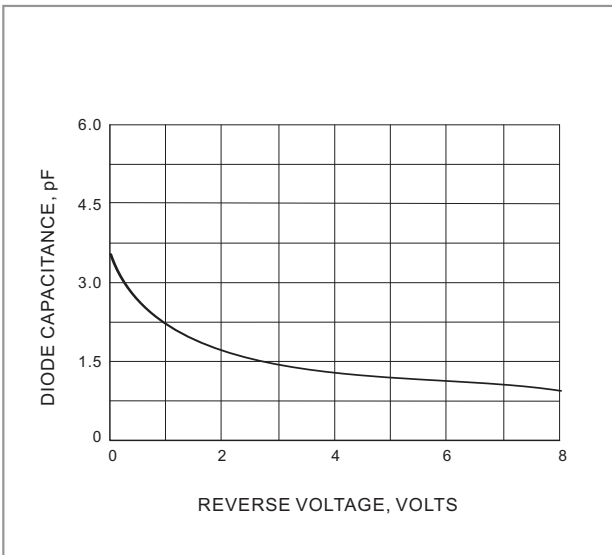
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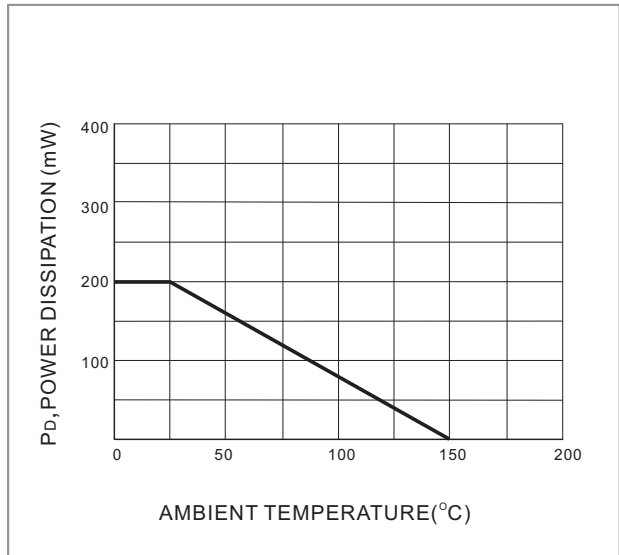
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

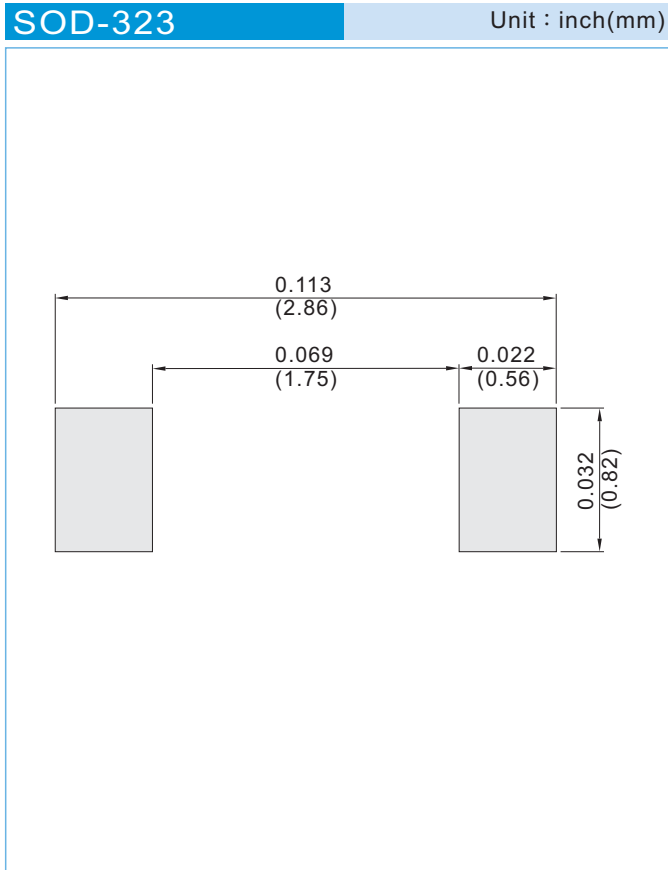


**FIG. 4 POWER DERATING CURVE**



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## MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel

### LEGAL STATEMENT

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