

## Two Terminals SMD Switching Diodes

### Features

- Fast Switching Speed
- High Conductance
- Suitable for Automatic Insertion
- Electrically Identical to Standard JEDEC
- RoHS compliant



SOD-323

### Mechanical Data

<b>Case:</b>	SOD-323, Plastic Case
<b>Terminals:</b>	Solderable per MIL-STD-750, Method 2026
<b>Weight:</b>	0.008 gram



### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	1N4148WS	1N4448WS	BAV16WS	Unit	Conditions
<b>V<sub>RM</sub></b>	Reverse Voltage	75			V	
<b>V<sub>RRM</sub></b>	Peak Reverse Voltage	100			V	
<b>V<sub>RMS</sub></b>	RMS Voltage	50			V	
<b>V<sub>DC</sub></b>	Max. DC Blocking Voltage	75			V	
<b>I<sub>F(AV)</sub></b>	Average Forward Current	200			mA	
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	4			A	PW=1.0us
<b>P<sub>D</sub></b>	Power Dissipation	200			mW	above 25°C
<b>V<sub>F</sub></b>	Max Forward Voltage	0.715	-	-	V	IF=1mA
		-	0.72	-		IF=5mA
		0.855	-	0.855		IF=10mA
		1.0	-	-		IF=50mA
		-	1.0	-		IF=100mA
		1.25	-	-		IF=150mA

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## 1N4148WS/1N4448WS/BAV16WS

Symbol	Description	1N4148WS	1N4448WS	BAV16WS	Unit	Conditions
<b>I<sub>R</sub></b>	Max. Reverse Current	0.025	-	-	uA	VDC=20V
		2.5	2.5	1.0		VDC=75V
<b>C<sub>J</sub></b>	Junction Capacitance	1.5	4.0	2.0	pF	VR=0V, f=1MHz
<b>T<sub>rr</sub></b>	Reverse Recovery Time	4.0	4.0	6.0	ns	IF=10mA to IR=1mA, VR=6V, RL=100Ω
<b>R<sub>θJA</sub></b>	Thermal Resistance	640			°C/W	
<b>T<sub>J</sub></b>	Operating Junction Temperature Range	-55 to +150			°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-55 to +150			°C	

### Typical Characteristics Curves

Fig.1- Power Derating Curve

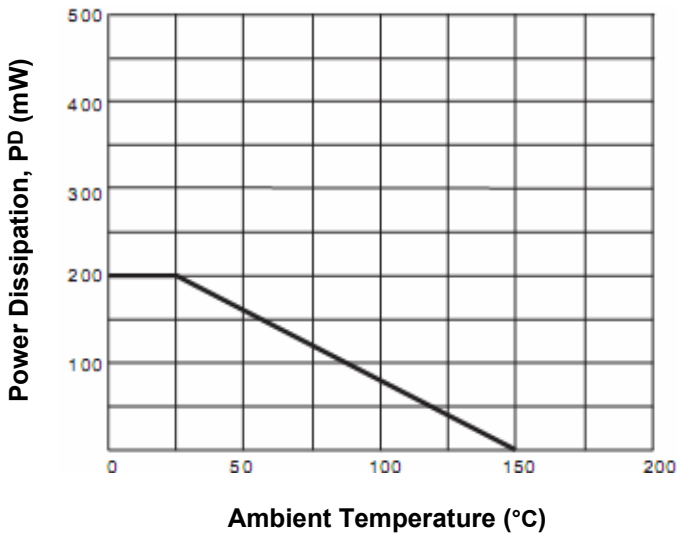
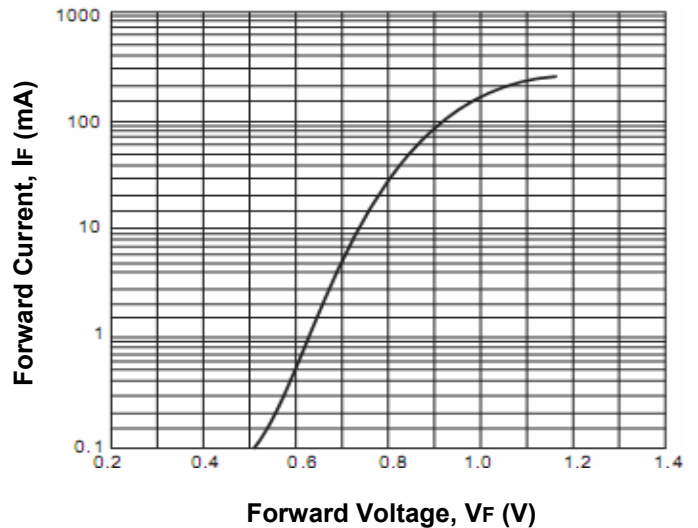


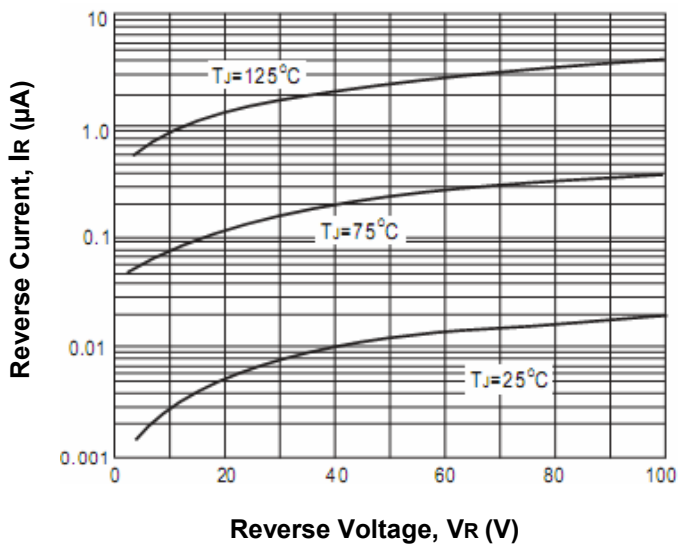
Fig.2- Typical Forward Characteristics



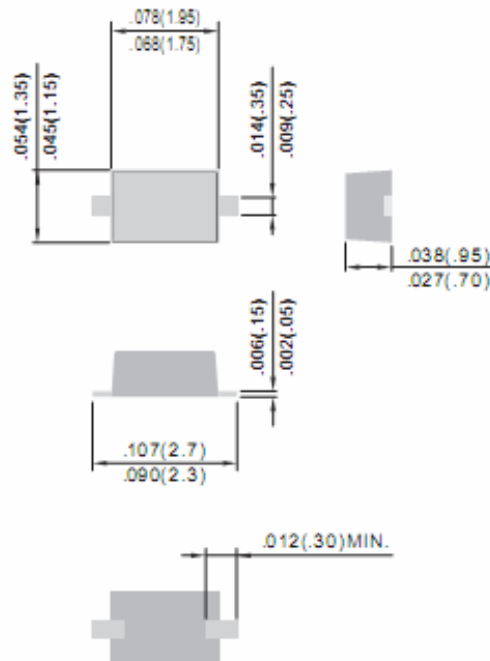
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Fig.3- Typical Reverse Characteristics



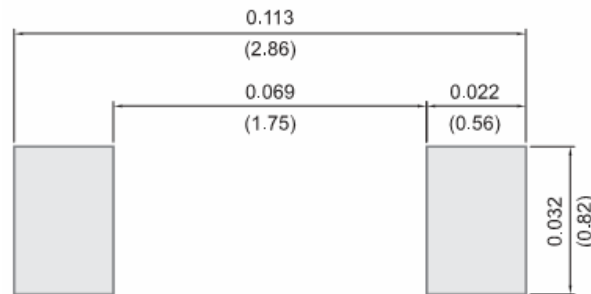
### Dimensions in inch(mm)



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### Mount Pad Layout

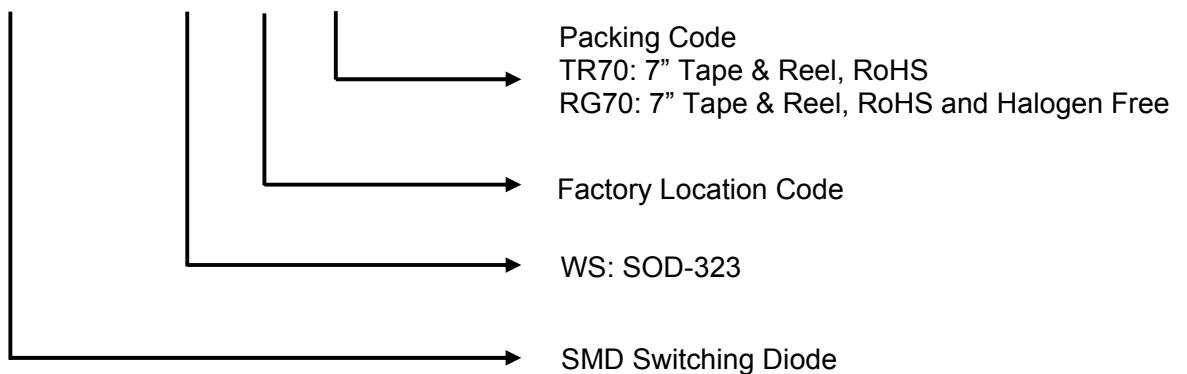


### Packing Information:

Tape and Reel --- 5K per 7" plastic reel

### How to Order

1N4X48/BAV16 WS -XX-XX



# Two Terminals SMD Switching Diodes

## 1N4148WS/1N4448WS/BAV16WS

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