



1N4148WS, 1N4448WS, BAV16WS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 250mWatts

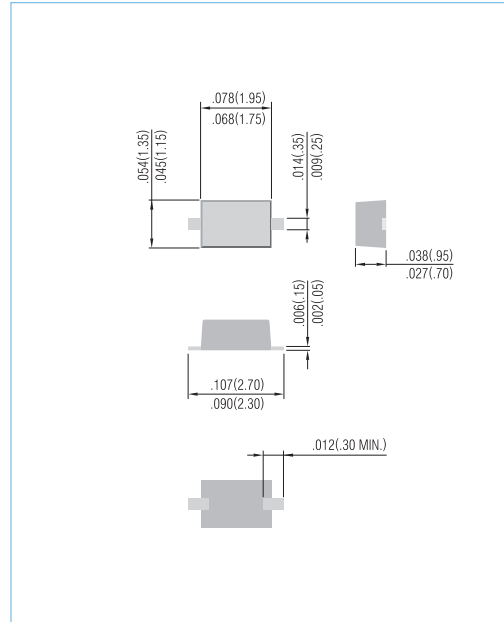
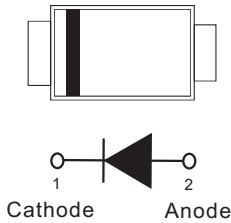
SOD-323 Unit: inch (mm)

FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 0.0001 ounce, 0.0041 gram
- Polarity : Color band cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	1N4148WS	1N4448WS	BAV16WS	UNITS
Marking Code	-	A2	A3	A6	-
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 $T_A=25^\circ\text{C}$	$I_{F(AV)}$	200			mA
Peak Forward Surge Current, 0.001ms	I_{FSM}	4			A
Power Dissipation Derate Above 25°C	P_D	250			mW
Maximum Forward Voltage	V_F	0.715 @ 0.001A 0.855 @ 0.01A 1.0 / 0.05A 1.25 @ 0.15A	0.72 @ 0.005A 1.0 @ 0.1A	0.855 @ 0.01A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.025 @ 20V 2.5 @ 75V	2.5 @ 75V	1.0 @ 75V	μA
Junction Capacitance(Notes1)	C_J	1.5	4.0	2.0	pF
Maximum Reverse Recovery (Notes2)	t_{rr}	4	4	6	ns
Typical Thermal Resistance	$R_{\theta JA}$	500			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-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 $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$



1N4148WS, 1N4448WS, BAV16WS

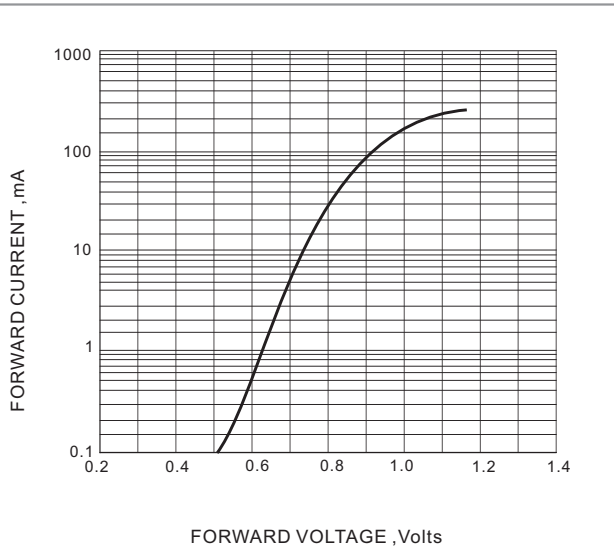


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

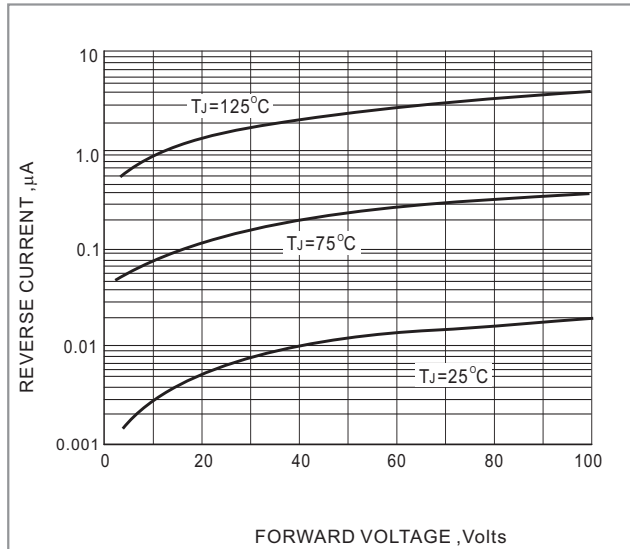


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

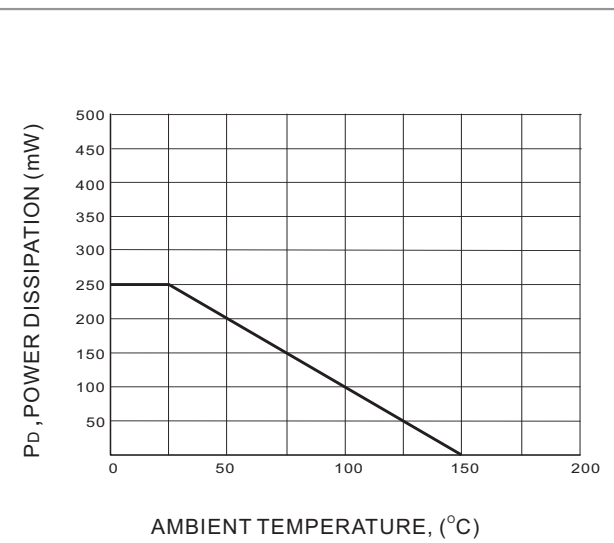
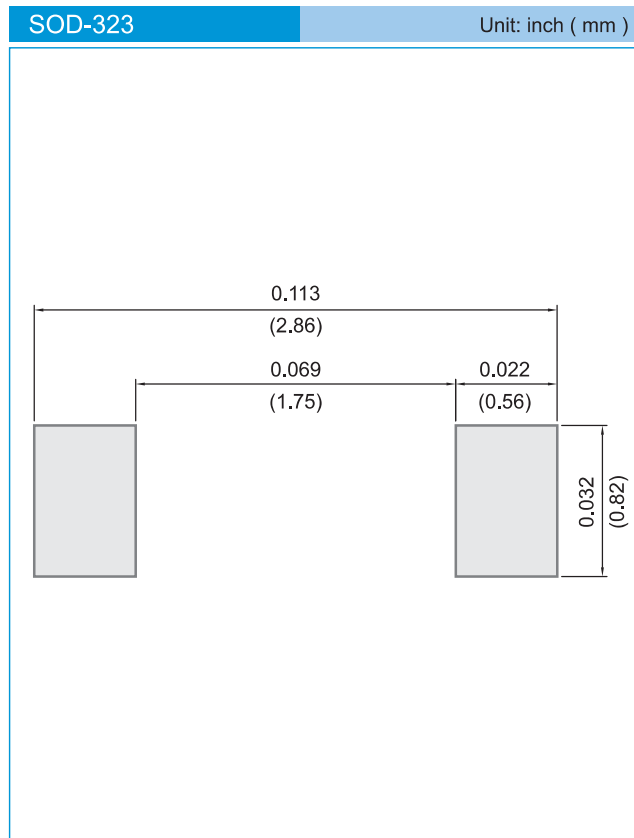


FIG. 3 POWER DERATING CURVE



1N4148WS,1N4448WS,BAV16WS

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

Copyright PanJit International, Inc 2010

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.