

1N4148WS,1N4448WS,BAV16WS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 250mWatts

SOD-323

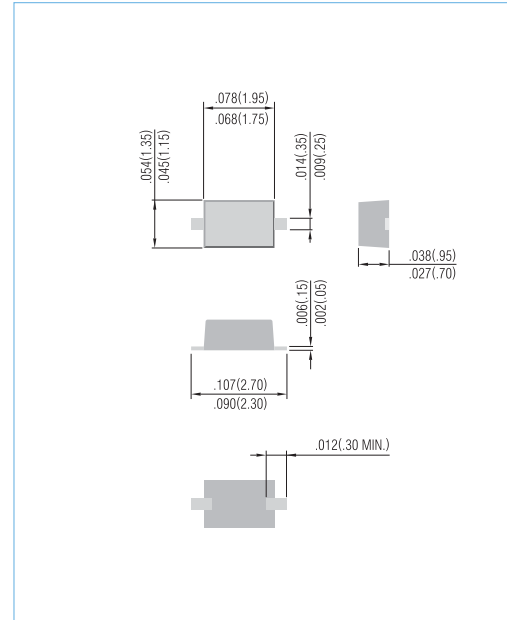
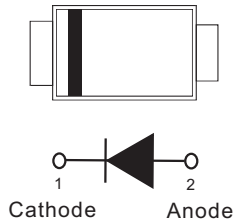
Unit: inch (mm)

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 $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$

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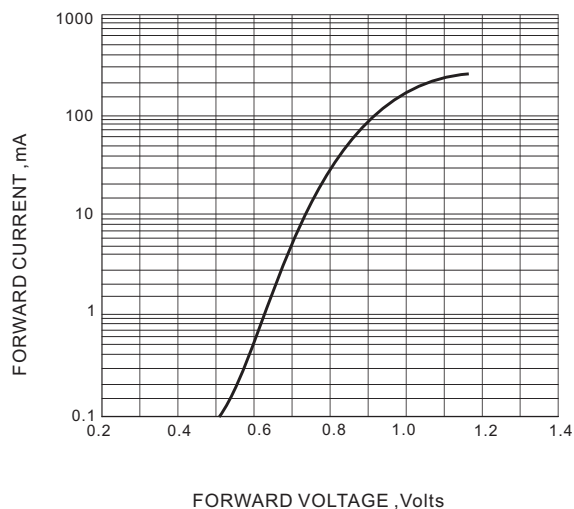


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

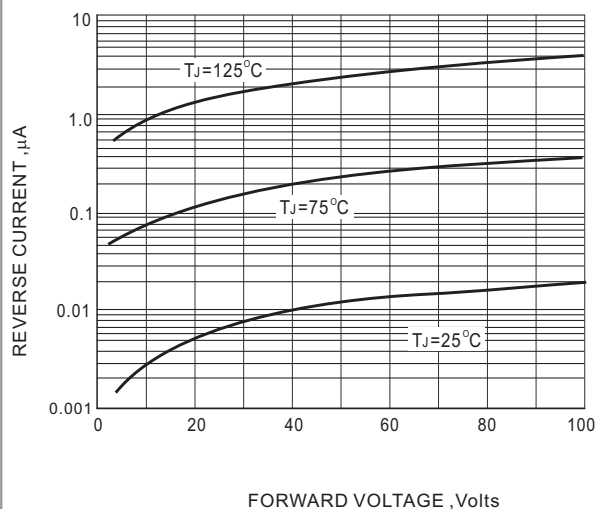


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

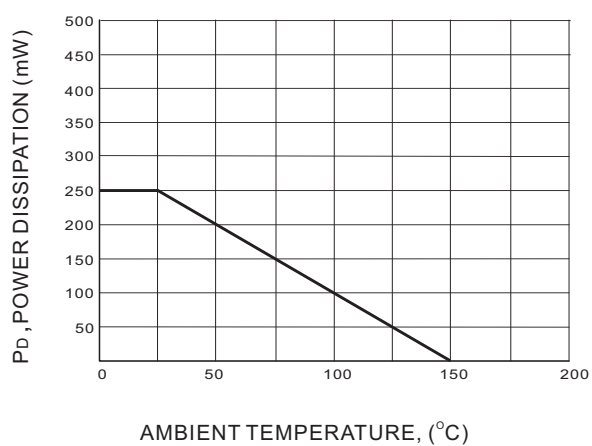
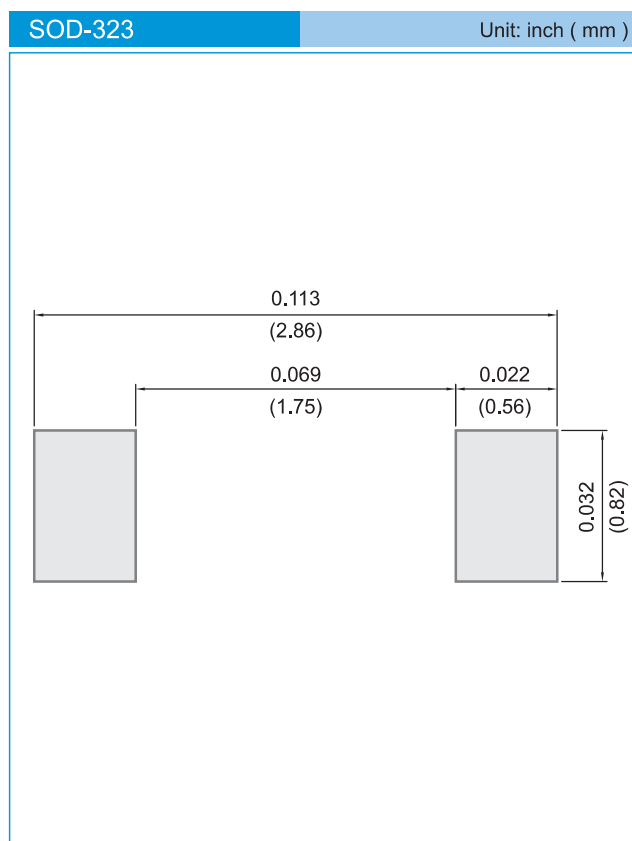


FIG. 3 POWER DERATING CURVE

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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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