



DATA SHEET

BAV19WS~BAV21WS

SURFACE MOUNT SWITCHING DIODES

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

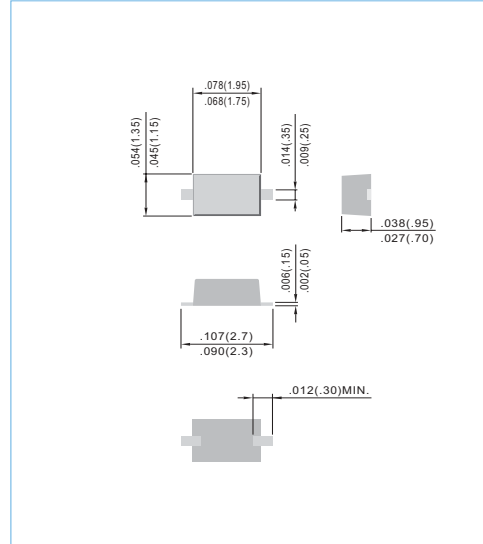
SOD-323 Unit: inch (mm)

FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Both normal and Pb free product are available :
 Normal : 80~95% Sn, 5~20% Pb
 Pb free: 98.5% Sn above

MECHANICAL DATA

Case: SOD-323, Plastic
 Terminals: Solderable per MIL-STD-202, Method 208
 Approx. Weight: 0.0045 gram



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_R	100	150	200	V
Peak Reverse Voltage	V_{RM}	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	I_o	200			mA
Peak Forward Surge Current, 1.0us	I_{FSM}	2.5			A
Power Dissipation Derate Above 25°C	P_{TOT}	200			mW
Maximum Forward Voltage at 0.1A	V_F	1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ C$	I_R	0.1			uA
Typical Junction Capacitance(Notes1)	C_J	5.0			pF
Maximum Reverse Recovery (Notes2)	T_{RR}	50			ns
Maximum Thermal Resistance	$R_{\theta JA}$	640			°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150			°C

NOTE:

1. C_J at $V_R=0, f=1MHz$
2. From $I_F=10mA$ to $I_R=1mA, V_R=6Volts, R_L=100\Omega$

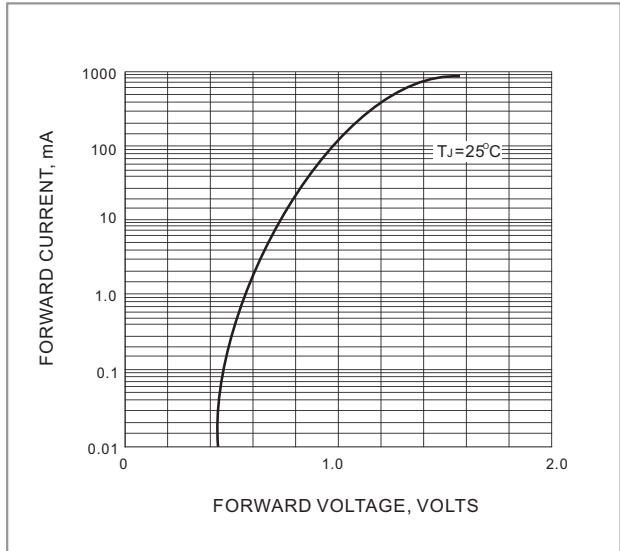


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

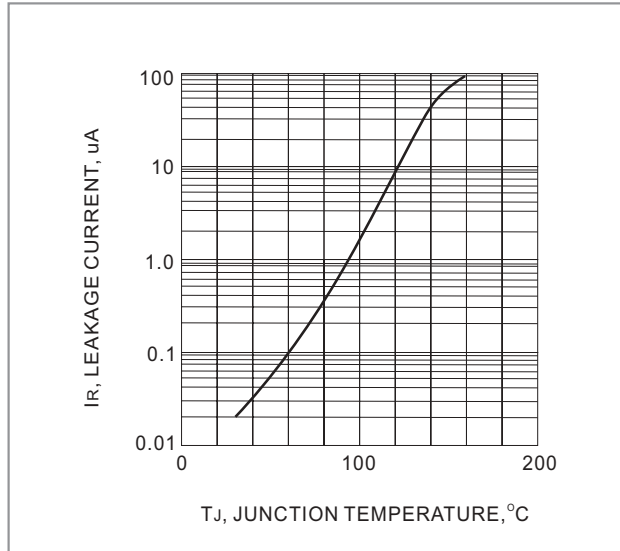


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

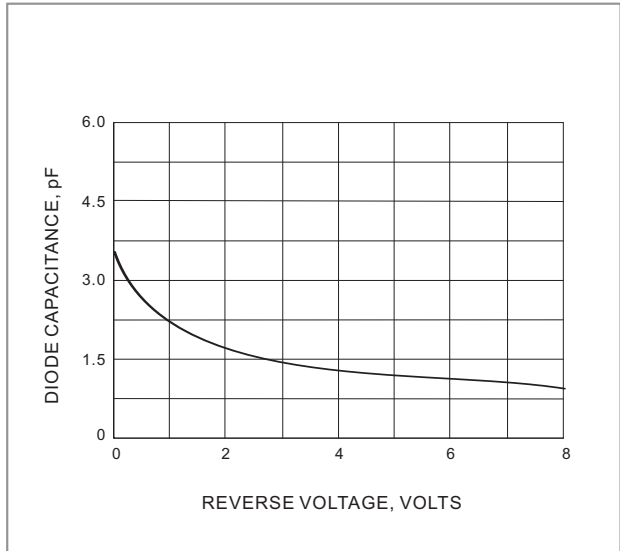


FIG. 3 TYPICAL JUNCTION CAPACITANCE

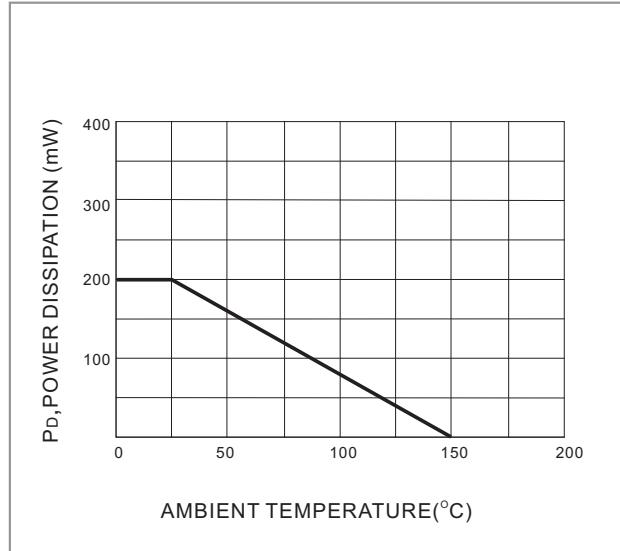


FIG. 4 POWER DERATING CURVE