PANJIT SEMI CONDUCTOR

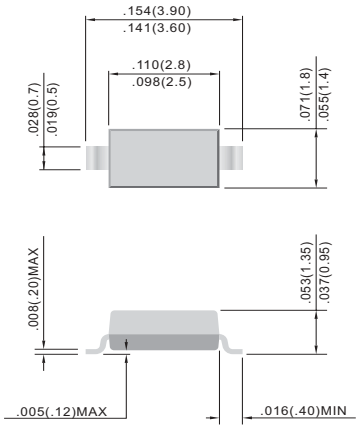
DATA SHEET

BAV19W~BAV21W

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 120-250 Volts **POWER** 410mWatts

SOD-123 Unit: inch (mm)



FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-202G, Method 208

Approx. Weight: 0.0104 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAV19W	BAV20W	BAV21W	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>=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}	410			mW
Maximum Forward Voltage at 0.1A	V_F	1.0			V
Maximum Reverse Current at T_J=25°C	I_R	0.1@ 100	0.1@ 150	0.1@ 200	uA
Typical Junction Capacitance(Notes1)	C_J	5.0			pF
Maximum Reverse Recovery (Notes2)	T_{RR}	50			ns
Maximum Thermal Resistance	$R_{\theta JA}$	450			°C /W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150			°C

NOTE:

1. CJ at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

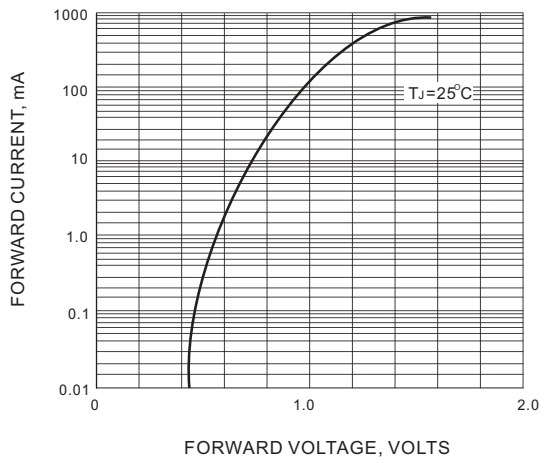


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

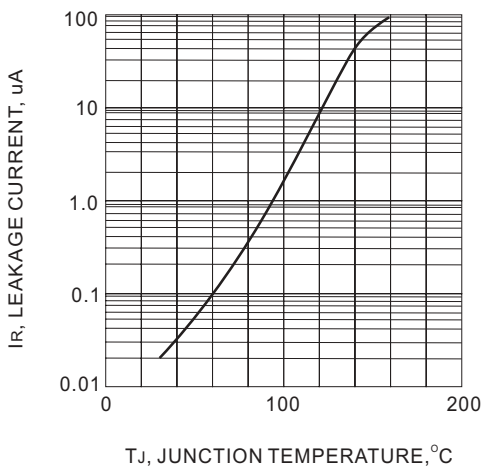


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

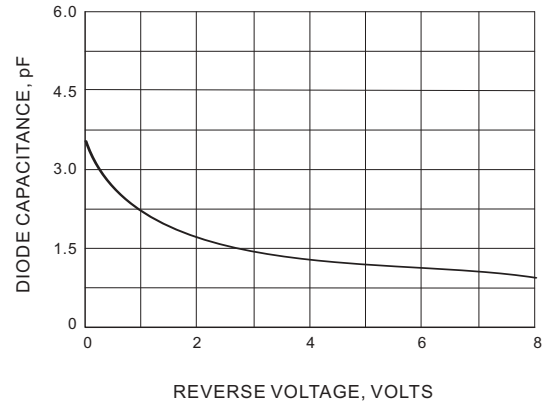


FIG. 3 TYPICAL JUNCTION CAPACITANCE

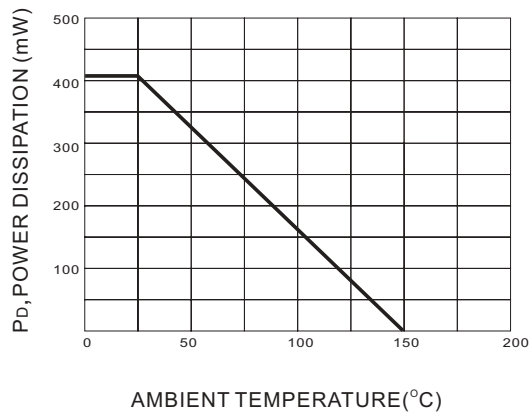
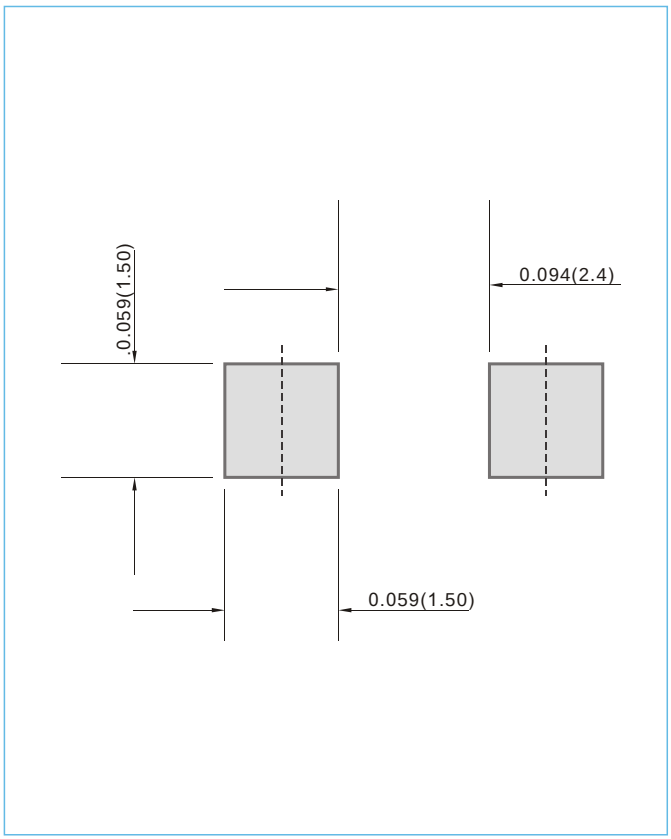


FIG. 4 POWER DERATING CURVE

MOUNTING PAD LAYOUT

SOD-123 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3.0K per 7" plastic Reel

LEGAL STATEMENT

IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.