PANJIT SEMI CONDUCTOR

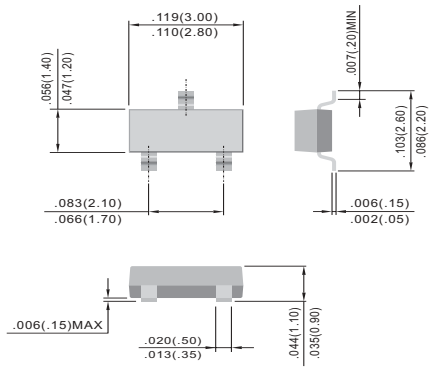
DATA SHEET

BAW56,BAV70,BAV99,BAL99

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 250mWatts

SOT- 23 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: SOT-23, Plastic

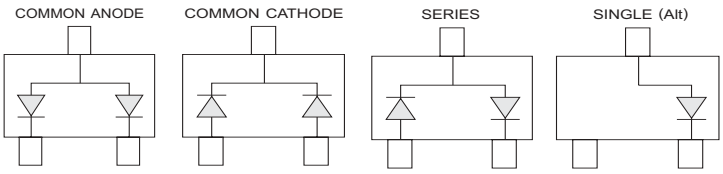
Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAW 56	BAV70	BAV99	BAL99	UNITS
Marking Code		JC	JA	JG	JF	
Reverse Voltage	V_R	75				V
Peak Reverse Voltage	V_{RM}	100				V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f>=50 Hz	I_O	150				mA
Peak Forward Surge Current,1.0us	I_{FSM}	2.0				A
Power Dissipation Derate Above 25°C	P_{TOT}	250				mW
Maximum Forward Voltage	V_F	0.715 @ IF=0.001A 0.855 @ IF=0.01A 1.0 @ IF=0.05A 1.25 @ IF=0.15A				V
Maximum DC Reverse Current at 25V 75V	I_R	0.03 2.5				µA
Maximum Junction Capacitance(Notes 1)	CJ	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	T_{RR}	4.0				ns
Maximum Thermal Resistance	$R_{\theta JA}$	625				°C /W
Junction Temperature Range	T_J	-55 TO +150				°C
Circuit Figure		Common Anode	Common Cathode	Series	Single (Alt)	



NOTE:

1. CJ at V_R=0, f=1MHZ

2.From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

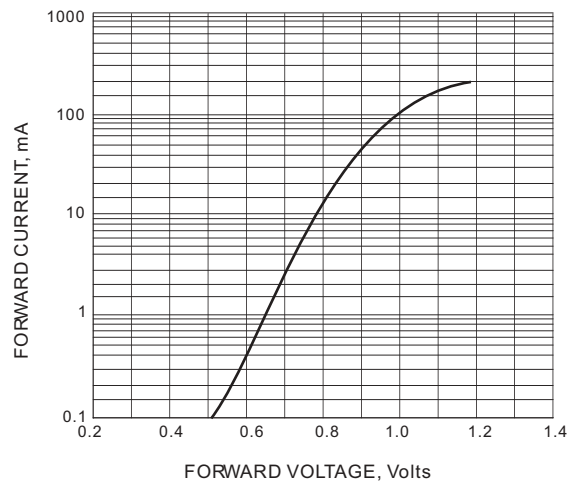


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

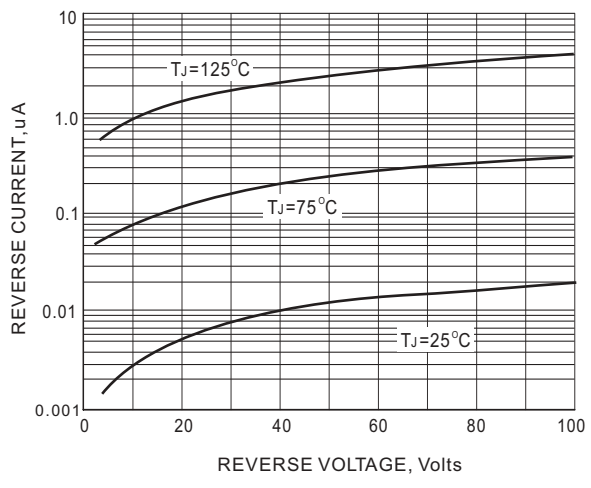


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

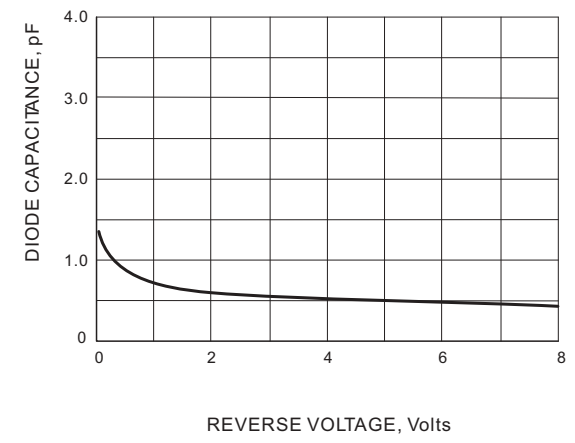


FIG. 3 TYPICAL JUNCTION CAPACITANCE

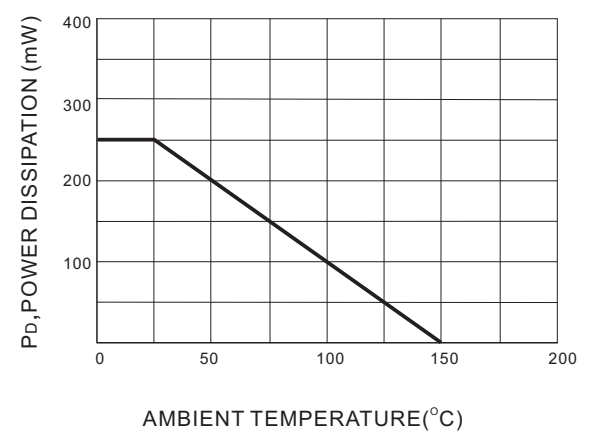


FIG. 4 POWER DERATING CURVE