BAS16TW, BAW56DW, BAV70DW, BAV99S

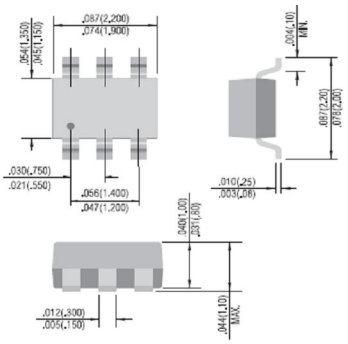
Surface Mount Switching Diodes

Voltage 100 Volts Power 200 mWatts

FEATURES

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion
- In compliance with EU RoHS 2002/95/EC directives
- High conductance

SOT-363



Unit: inch(mm)

MECHANICAL DATA

- Case: SOT-363 plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. weight: 0.006 grams
- Marking: A6, A8, A80, A82

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAS16TW	BAW56DW	BAV70DW	BAV99S	UNITS
Marking Code	-	16T	JC	JA	JB	-
Reverse Voltage	V_R	75				V
Peak Reverse Voltage	V_{RM}	100				V
Rectified Current (Average),Half Wave Rectification With Resistive Load and f≥50Hz	I_O	150				mA
Peak Forward Surge Current, 0.001ms	I_{FSM}	4.0				A
Power Dissipation Derate Above 25°C	P_{TOT}	200				mW
Maximum Forward Voltage	V_F	0.715@I_F=0.001A 0.855@I_F=0.01A 1.0@I_F=0.05A 1.25@I_F=0.15A				V
Maximum DC Reverse Current at 25V 75V	I_R	0.03 2.5				μA
Maximum Junction Capacitance (Note 1)	C_J	1.5				pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	4.0				ns
Typical Thermal Resistance	$R_{\theta JA}$	625				°C / W
Junction Temperature Range	T_J	-55 to +150				°C
Circuit Figure		Fig.48	Fig.51	Fig.52	Fig.32	

NOTE : 1. Reverse Bias Voltage = 0. f=1MHz
2. From I_F=10mA to I_R=-1mA. V_R=6V. R_L=100Ω

Characteristic and Rating Curve

Fig.1 Typical Forward Characteristic

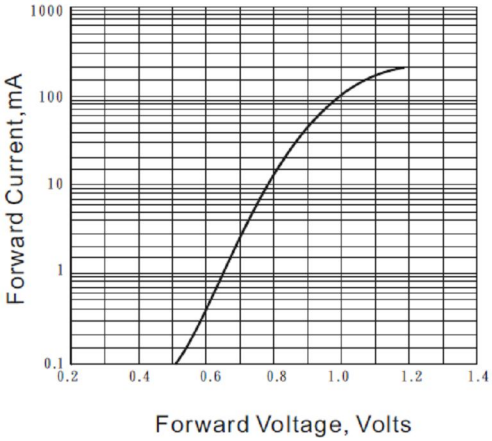


Fig.2 Typical Reverse Characteristic

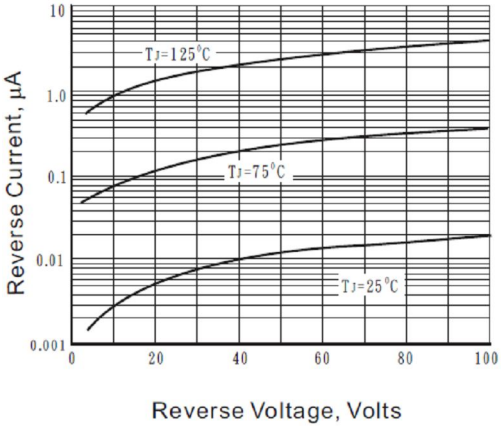
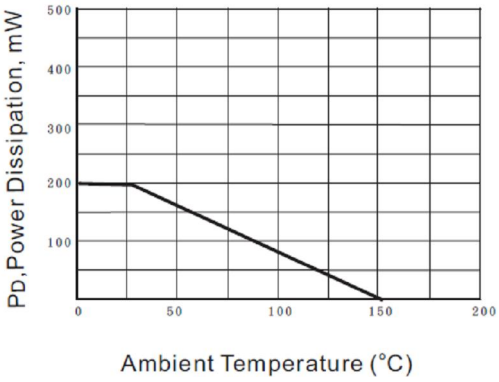


Fig.3 Power Derating Curve



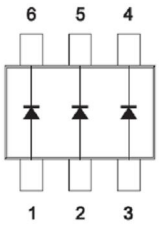


Fig.48

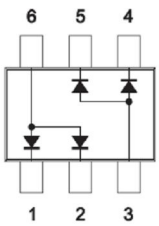


Fig.51

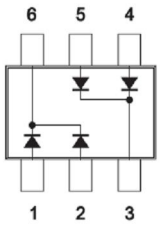


Fig.52

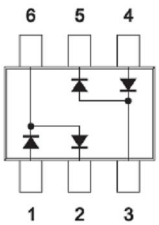


Fig.32