BAV70

Dual Surface Mount Switching Diode

Voltage Range
75 Volts
350m Watts Power Dissipation

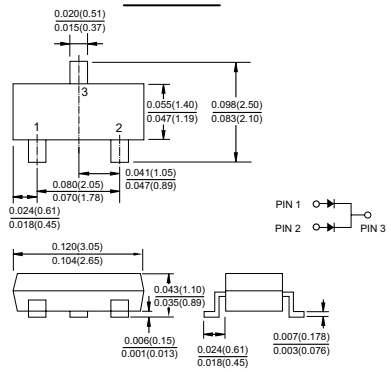
Features

- ✧ Fast switching speed
- ✧ Surface mount package ideally suited for automatic insertion
- ✧ For general purpose switching applications
- ✧ High conductance

Mechanical Data

- ✧ Case: SOT-23, Molded plastic
- ✧ Terminals: Solderable per MIIL-STD-202, Method 208
- ✧ Polarity: See diagram
- ✧ Marking: JJ
- ✧ Weight: 0.008 gram (approx.)

SOT-23



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	BAV70	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	I_{FM}	300	mA
Average Rectifier Output Current (Note 1)	Io	150	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0uS @ t=1.0S	I_{FSM}	 2.0 1.0	A
Power Dissipation (Note 1)	Pd	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	357	K/W

Electrical Characteristics

Type Number		Symbol	Min	Max	Units
Forward Voltage	IF=1.0mA IF= 10mA IF = 50mA IF=150mA	V_F	-	0.715 0.855 1.0 1.25	V
Peak Reverse Current	 VR=75V VR=75V, Tj=150℃ VR=25V, TJ=150℃ VR=20V	I_R	-	 2.5 50 30 25	 uA nA
Junction Capacitance	VR=0, f=1.0MHz	Cj	-	2.0	pF
Reverse Recovery Time (Note 2)		trr	-	4.0	nS

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.
2. Reverse Recovery Test Conditions: IF=IR=10mA, Irr=0.1 x I_R, R_L=100Ω.

RATINGS AND CHARACTERISTIC CURVES (BAV70)

FIG.1- FORWARD CHARACTERISTICS

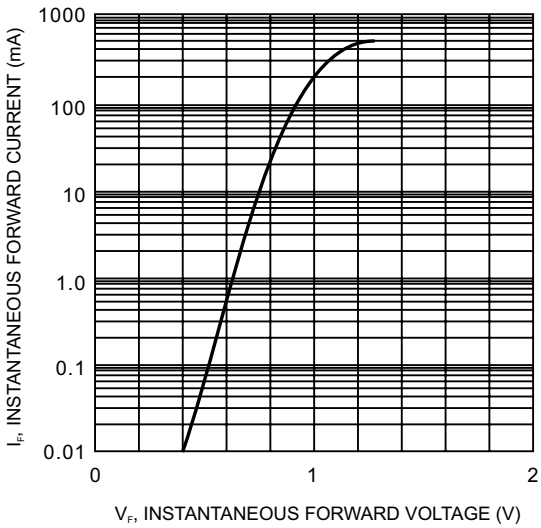
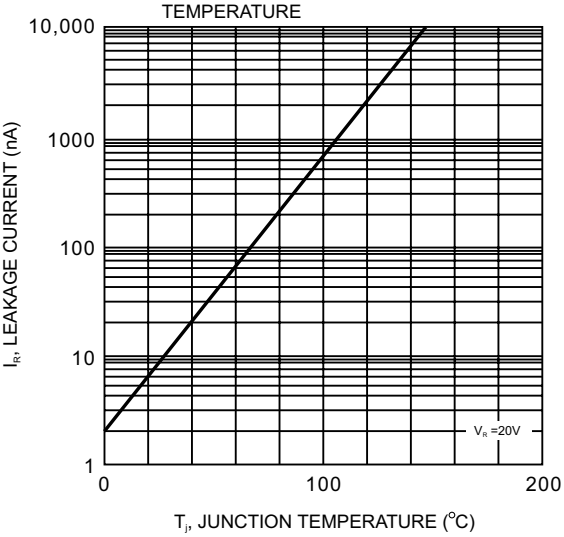
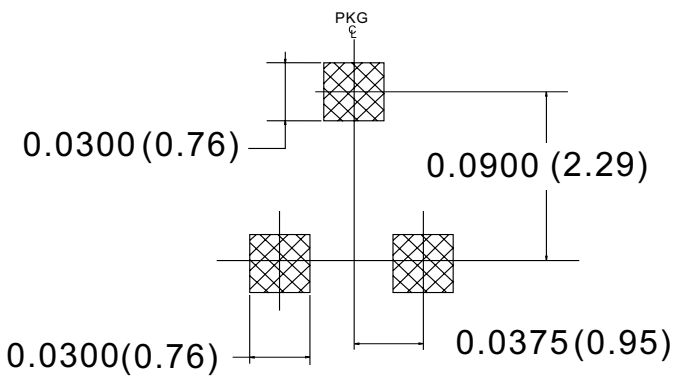


FIG.2- LEAKAGE CURRENT VS JUNCTION TEMPERATURE





LAND PATTERN RECOMMENDATION

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