PANJIT SEMI CONDUCTOR

BAW56 / BAV70 / BAV99 / BAL99

Surface Mount Switching Diodes

VOLTAGE 100 Volt **POWER** 250 mWatt

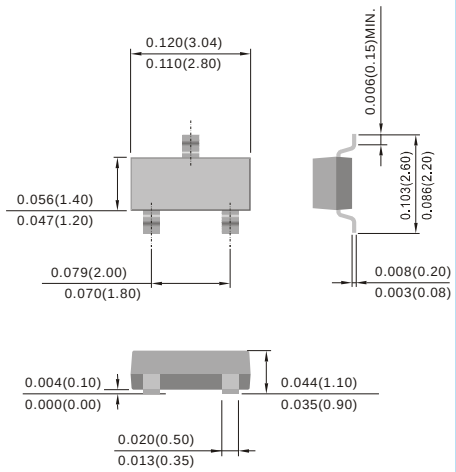
FEATURES

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion
- Electrically identical to Standard JEDEC
- High Conductance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOT-23, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Apporx. Weight : 0.0084 grams

SOT-23 Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAW56	BAV70	BAV99	BAL99	UNITS
Marking Code	-	JC	JA	JB	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,0.001ms	I_{FSM}	4.0				A
Power Dissipation Derate Above 25°C	P_{TOT}	250				mW
Maximum Forward Voltage	V_F	0.715 @ I_F=1mA 0.855 @ I_F=10mA 1.0 @ I_F=50mA 1.25 @ I_F=150mA				V
Maximum DC Reverse Current at 25V 75V	I_R	0.03 2.5				µA
Maximum Junction Capacitance (Notes 1)	C_J	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	t_{rr}	4.0				ns
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	360 205				°C / W
Junction Temperature Range	T_J	-55 to +150				°C
Circuit Figure	-	Common Anode	Common Cathode	Series	Single(Alt)	-

NOTES :

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

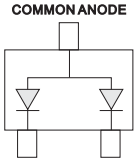


Fig.15

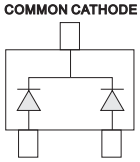


Fig.16

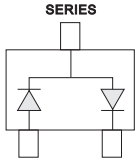


Fig.17

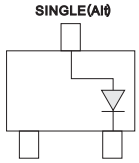


Fig.18

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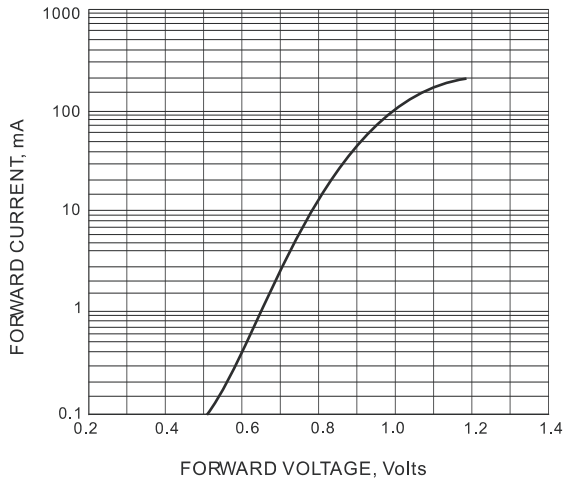

FIG. 1-TYPICAL FORWARD CHARACTERISTIC

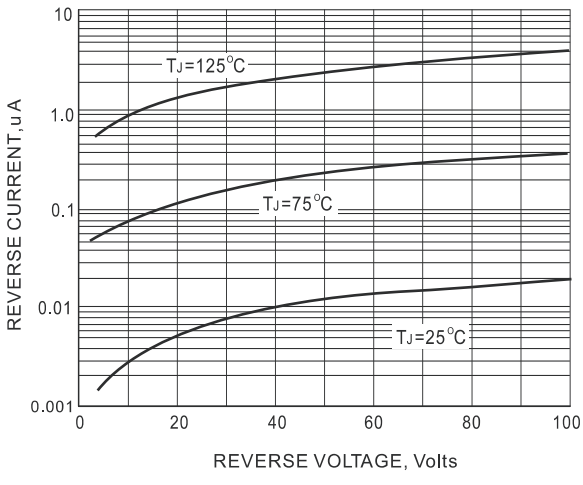

FIG. 2-TYPICAL REVERSE CHARACTERISTICS

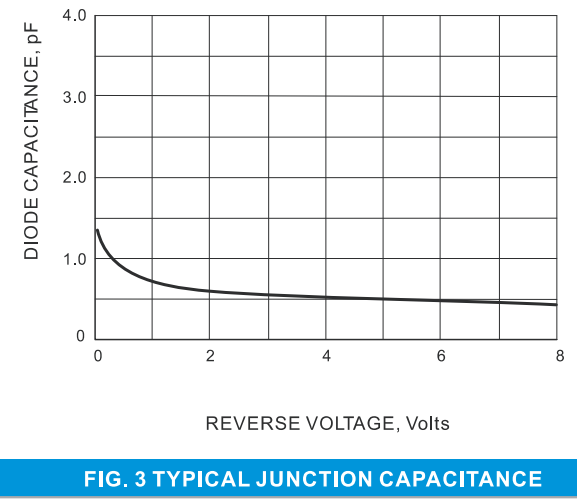

FIG. 3 TYPICAL JUNCTION CAPACITANCE

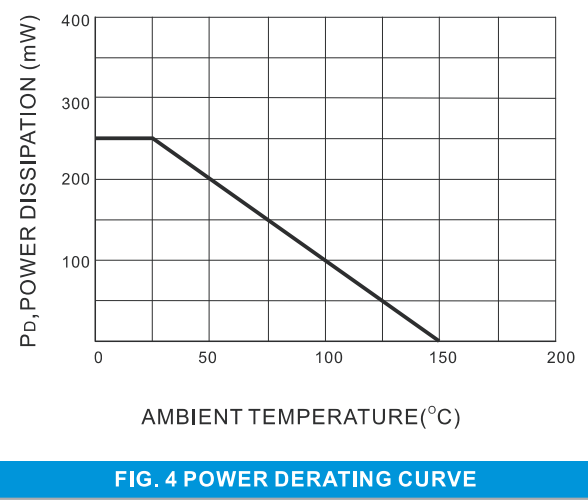

FIG. 4 POWER DERATING CURVE

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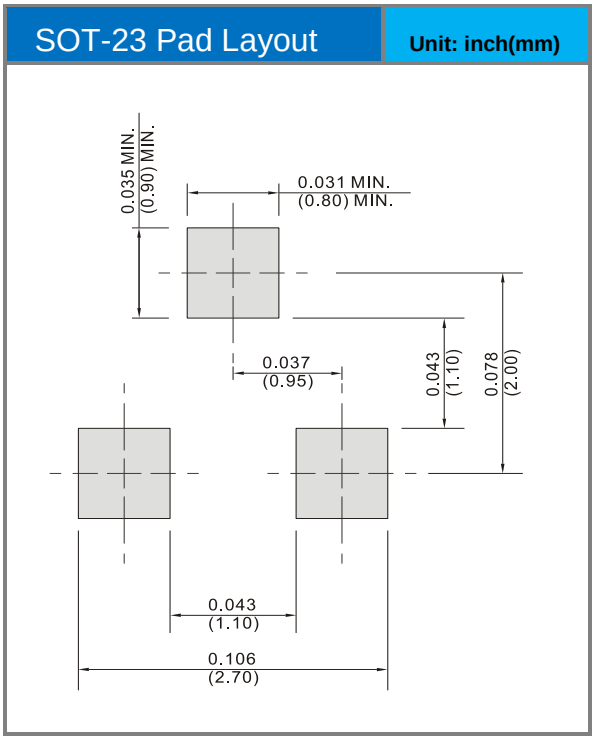
Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAW56	SOT-23	3K pcs / 7” reel	JC
BAV70	SOT-23	3K pcs / 7” reel	JA
BAV99	SOT-23	3K pcs / 7” reel	JB
BAL99	SOT-23	3K pcs / 7” reel	JF

Mounting Pad Layout

SOT-23 Pad Layout — Unit: inch(mm)



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