BAW56 / BAV70 / BAV99 / BAL99

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 250mWatts

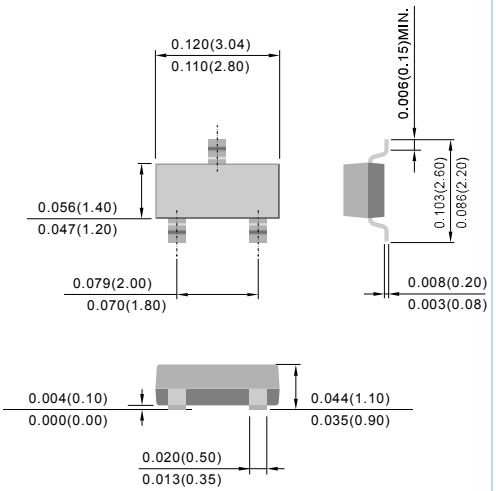
FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0003 ounces, 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)	-

NOTE:

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

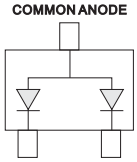


Fig.15

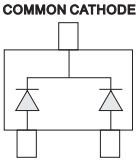


Fig.16

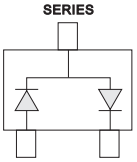


Fig.17

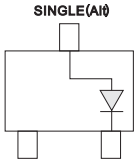


Fig.18

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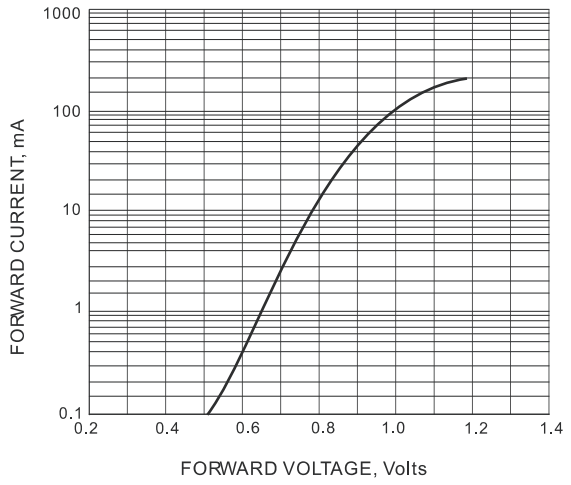


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

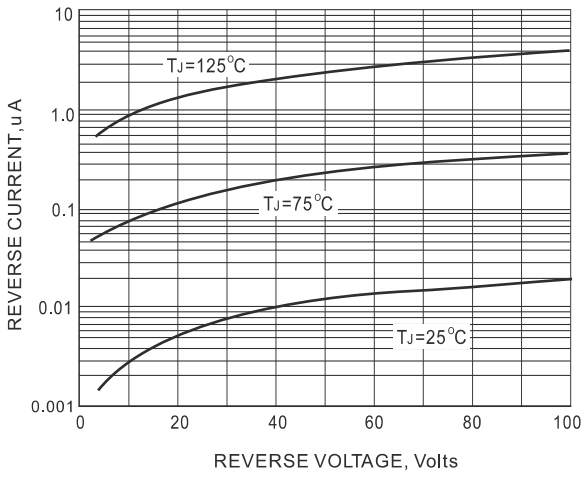


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

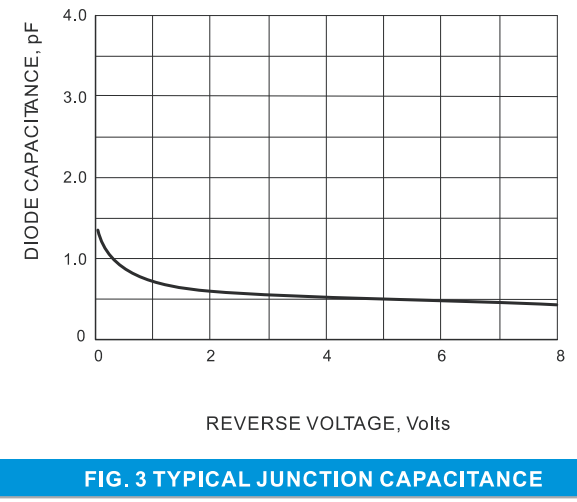


FIG. 3 TYPICAL JUNCTION CAPACITANCE

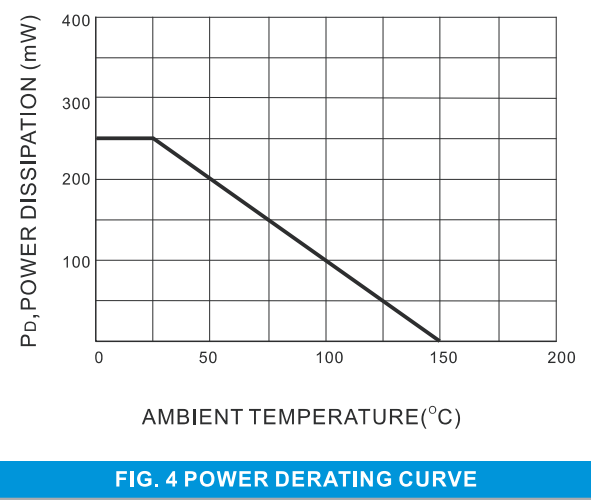
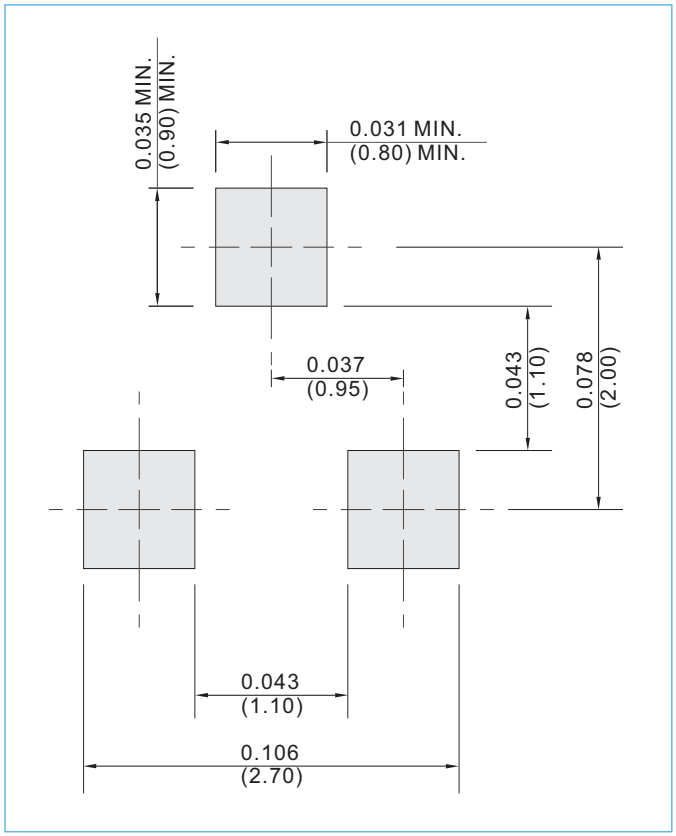


FIG. 4 POWER DERATING CURVE

BAW56 / BAV70 / BAV99 / BAL99

MOUNTING PAD LAYOUT

SOT-23 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 3K per 7” plastic Reel

BAW56 / BAV70 / BAV99 / BAL99

Part No_packing code_Version

BAW56_R1_00001

BAW56_R2_00001

For example :

RB500V-40_R2_00001

- Part No.
- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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