

BAW56TB,BAV70TB,BAV99TB,BAL99TB

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100Volt **POWER** 200mWatt

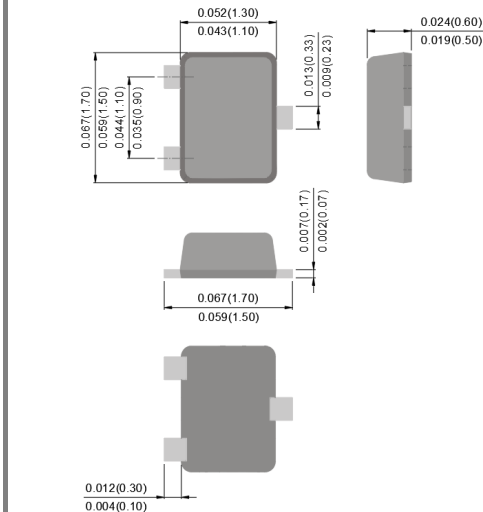
SOT-523 Dimension **Unit: inch(mm)**

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-523, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.002 grams



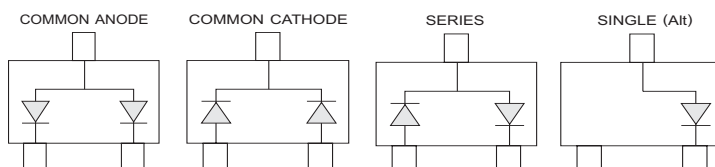
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAW56TB	BAV70TB	BAV99TB	BAL99TB	UNITS
Marking Code		LB	LC	LD	LF	
Reverse Voltage	V_R	75				V
Peak Reverse Voltage	V_{RM}	100				V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	I_O	150 75				mA
Peak Forward Surge Current, 1.0us	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(Notes 1)	C_J	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	T_{RR}	4.0				ns
Typical Maximum Thermal Resistance	$R_{\theta JA}$	833				°C / W
Junction Temperature Range	T_J	-55 to +150				°C
Circuit Figure		Common Anode	Common Cathode	Series	Single(Alt)	

NOTE:

1. C_J at $V_R=0$, $f=1MHz$
2. From $I_F=10mA$ to $I_R=1mA$, $V_R=6Volts$, $R_L=100\Omega$



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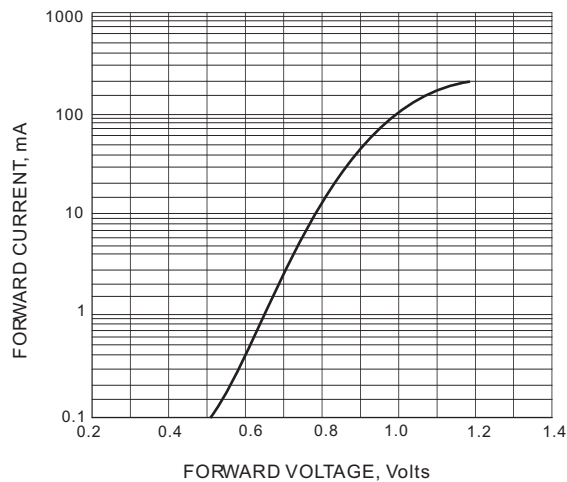


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

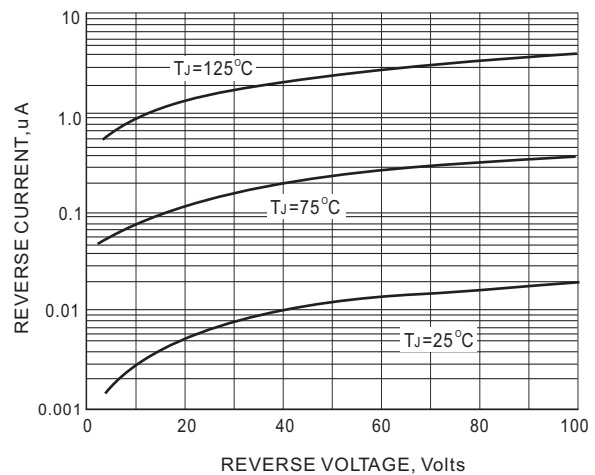


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

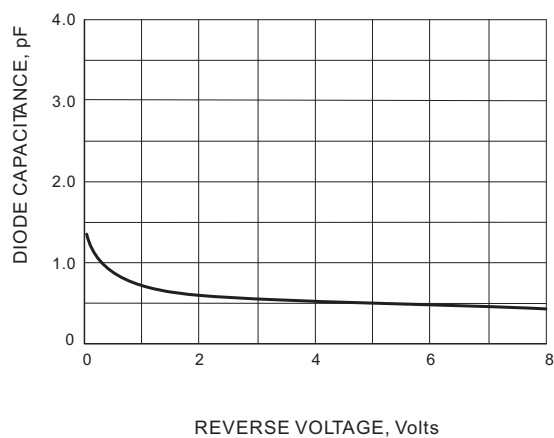


FIG. 3 TYPICAL JUNCTION CAPACITANCE

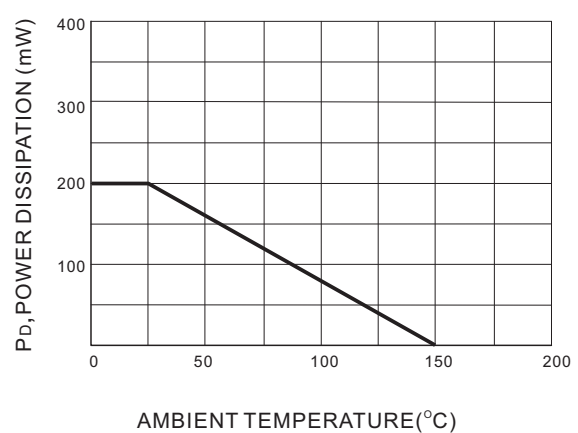


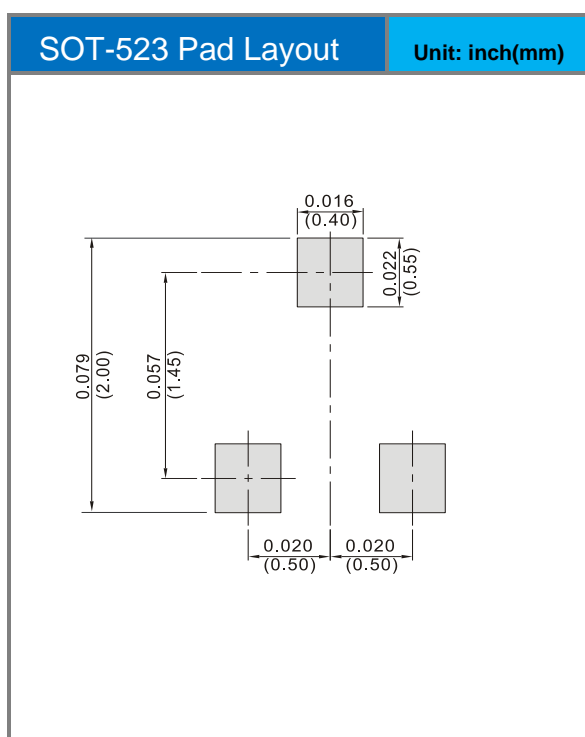
FIG. 4 POWER DERATING CURVE

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAW56TB	SOT-523	4K pcs / 7" reel	LB
BAV70TB	SOT-523	4K pcs / 7" reel	LC
BAV99TB	SOT-523	4K pcs / 7" reel	LD
BAL99TB	SOT-523	4K pcs / 7" reel	LF

Mounting Pad Layout



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