



# BAW56TB,BAV70TB,BAV99TB,BAL99TB

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100Volts **POWER** 150mWatts

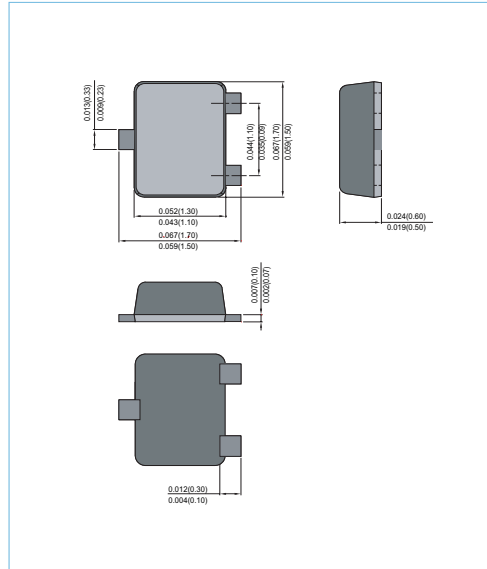
SOT-523 Unit: inch ( mm )

### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

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



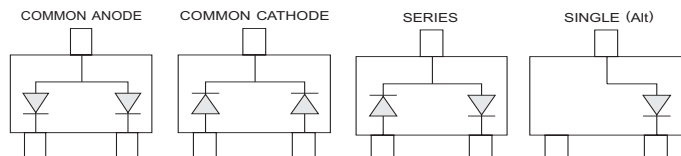
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	$I_O$	Single Diode 150		Double Diode 75		mA
Peak Forward Surge Current, 1.0us	$I_{FSM}$	2.0				A
Power Dissipation Derate Above 25°C	$P_{TOT}$	150				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				$\mu A$
Maximum Junction Capacitance( Notes 1)	$C_J$	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	$T_{RR}$	4.0				ns
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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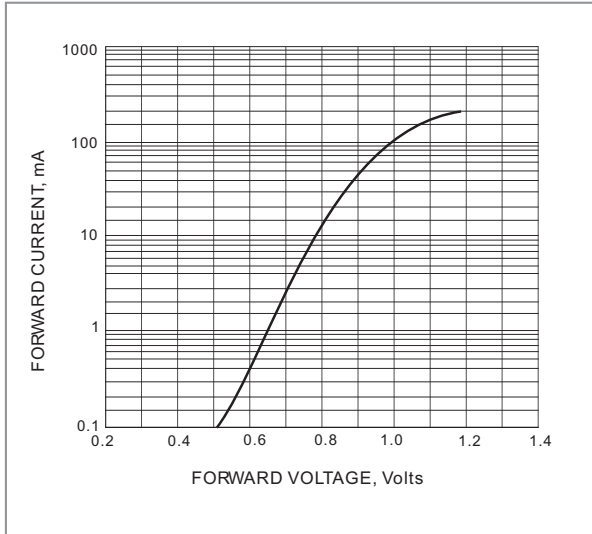


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

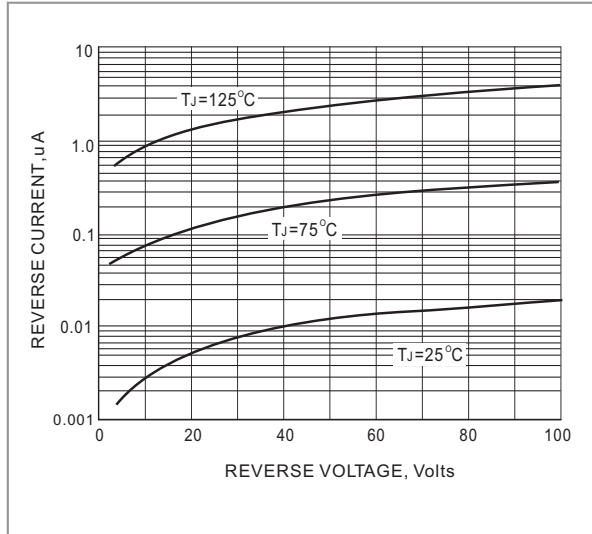


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

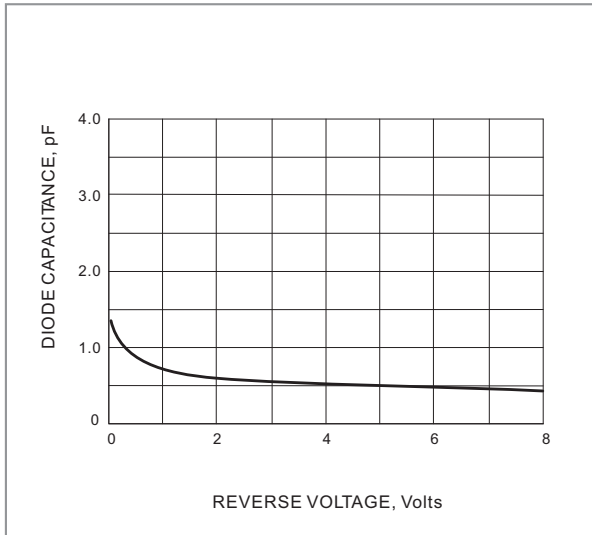


FIG. 3 TYPICAL JUNCTION CAPACITANCE

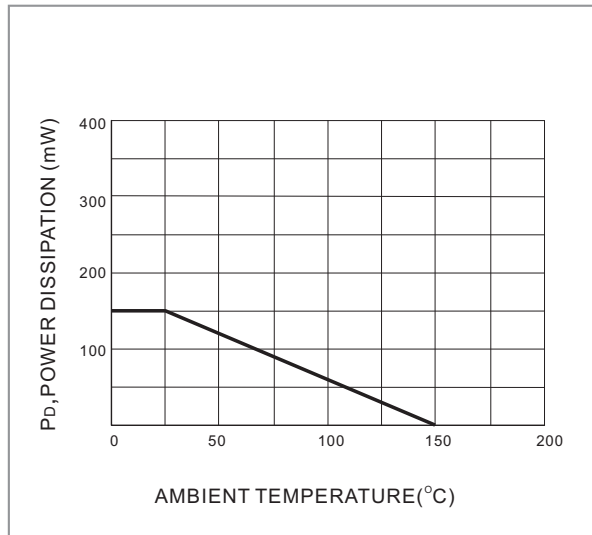
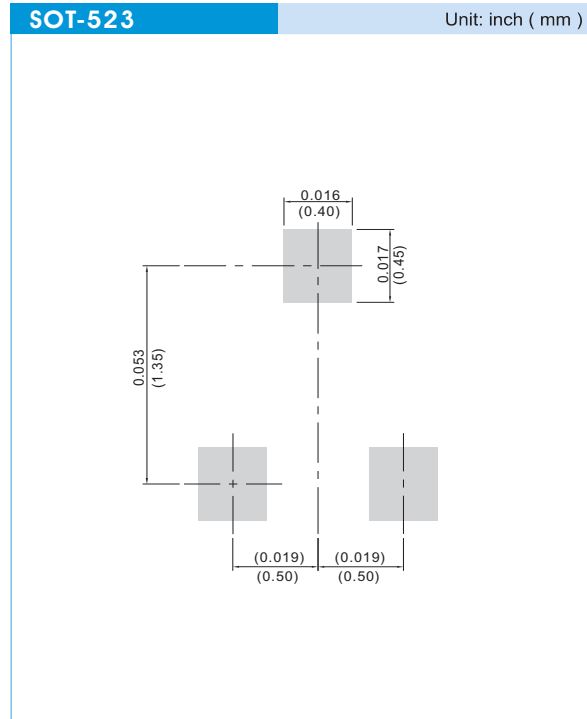


FIG. 4 POWER DERATING CURVE



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## MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information

T/R - 3K per 7" plastic Reel

T/R - 10K per 13" plastic Reel

### LEGAL STATEMENT

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