

## BAW56TB,BAV70TB,BAV99TB,BAL99TB

### SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100Volt **POWER** 200mWatt

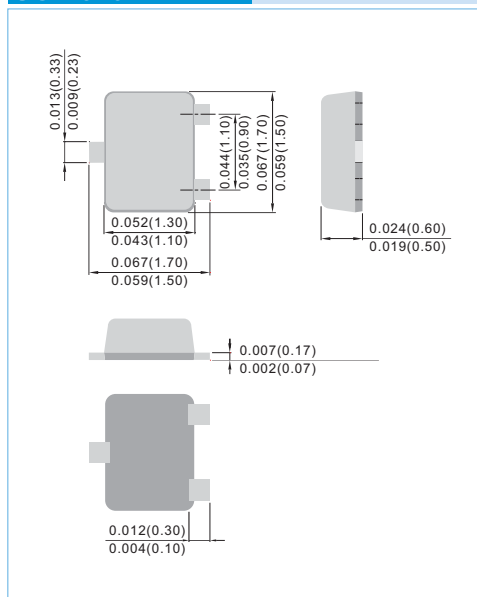
#### FEATURES

- 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### MECHANICAL DATA

- Case : SOT-523, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.00007 ounces, 0.002 grams

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



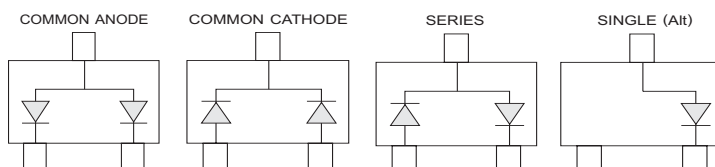
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	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				$\mu A$
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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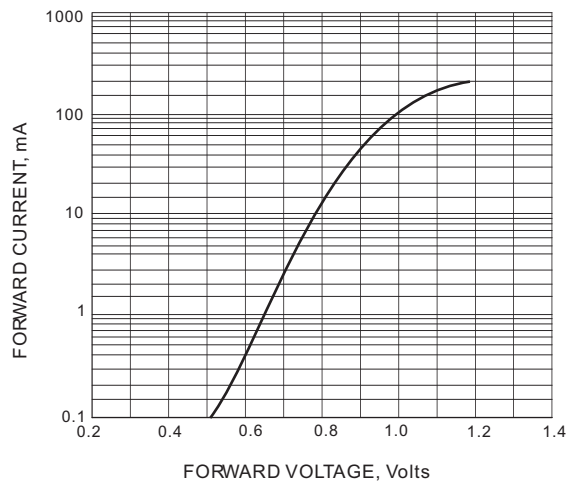


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

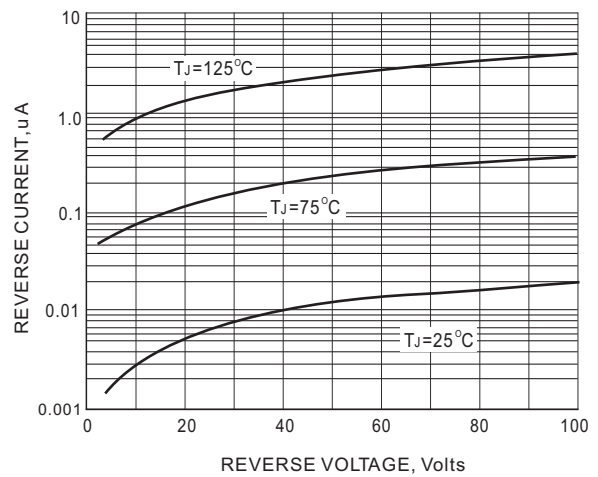


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

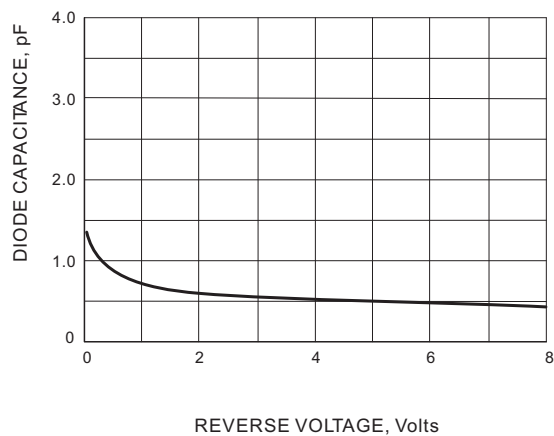


FIG. 3 TYPICAL JUNCTION CAPACITANCE

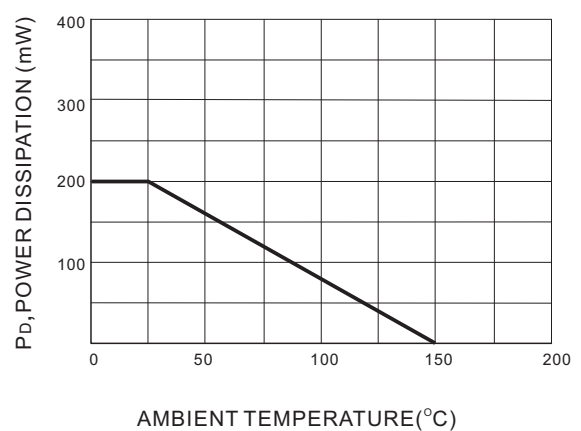
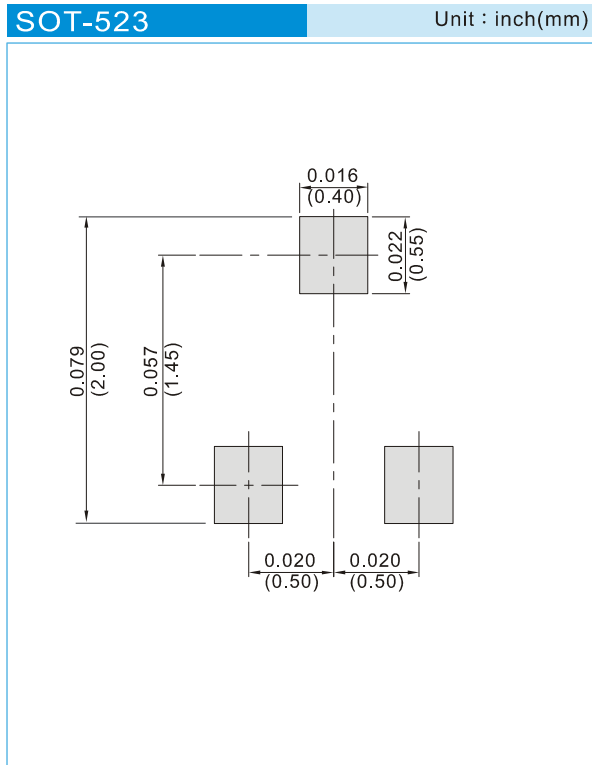


FIG. 4 POWER DERATING CURVE

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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information

T/R - 4K per 7" plastic Reel

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Part No\_packing code\_Version

BAW56TB\_R1\_00001

For example :

**RB500V-40\_R2\_00001**



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



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