



# BAW56W,BAV70W,BAV99W,BAL99W

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100Volts **POWER** 200mWatts

**SOT-323** Unit : inch(mm)

### FEATURES

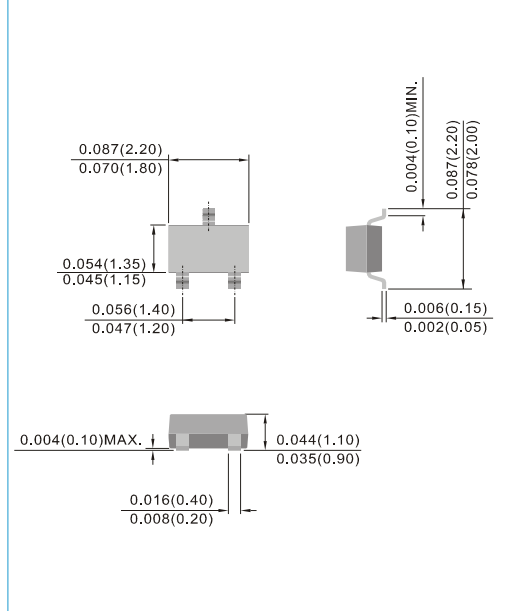
- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

Case: SOT-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0002 Ounces, 0.005 Grams

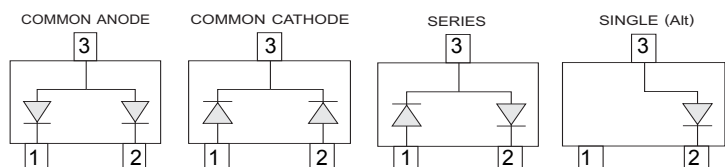


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	BAW56W	BAV70W	BAV99W	BAL99W	UNITS
Marking Code		JC	JA	JB	JF	
Reverse Voltage	V <sub>R</sub>	75				V
Peak Reverse Voltage	V <sub>RM</sub>	100				V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz	I <sub>o</sub>	150				mA
Peak Forward Surge Current,0.001ms	I <sub>FSM</sub>	4.0				A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	200				mW
Maximum Forward Voltage	V <sub>F</sub>	0.715 @ I <sub>F</sub> =0.001A 0.855 @ I <sub>F</sub> =0.01A 1.0 @ I <sub>F</sub> =0.05A 1.25 @ I <sub>F</sub> =0.15A				V
Maximum DC Reverse Current at 25V 75V	I <sub>R</sub>	0.03 2.5				μA
Maximum Junction Capacitance( Notes 1)	C <sub>J</sub>	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	T <sub>RR</sub>	4.0				ns
Typical Thermal Resistance, Junction to Ambient(Notes 3) Junction to Case (Notes 4)	R <sub>θJA</sub> R <sub>θJC</sub>	625 250				°C / W
Junction Temperature Range	T <sub>J</sub>	-55 to +150				°C
Circuit Figure		Common Anode	Common Cathode	Series	Single(Alt)	

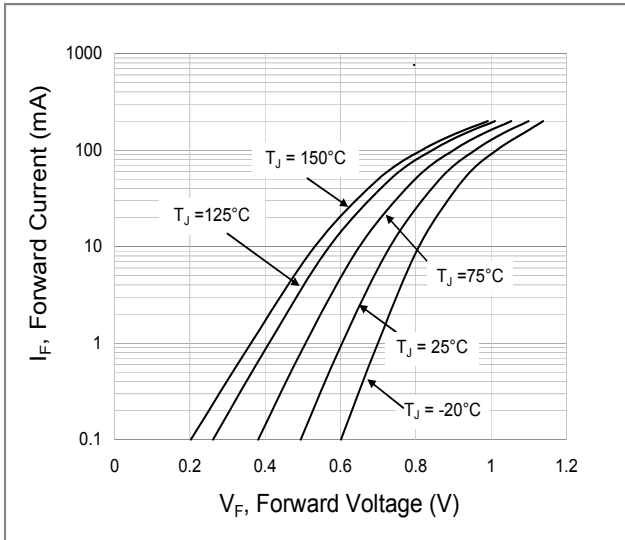
**NOTE:**

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω
3. Mounted on minimum pad.
4. Mounted on 48 cm<sup>2</sup> PCB.

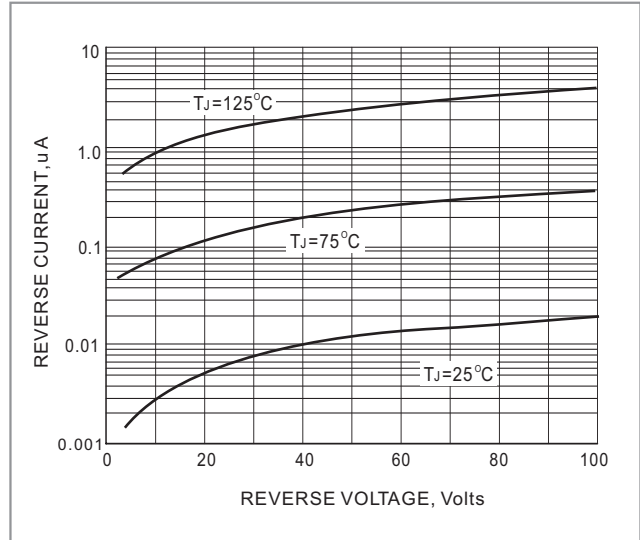




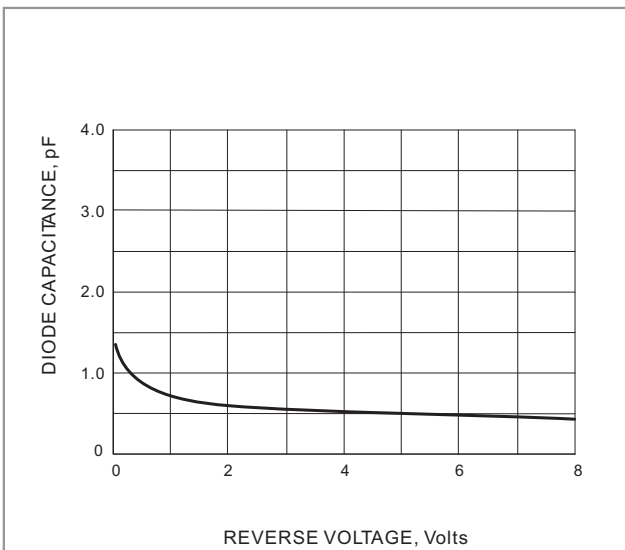
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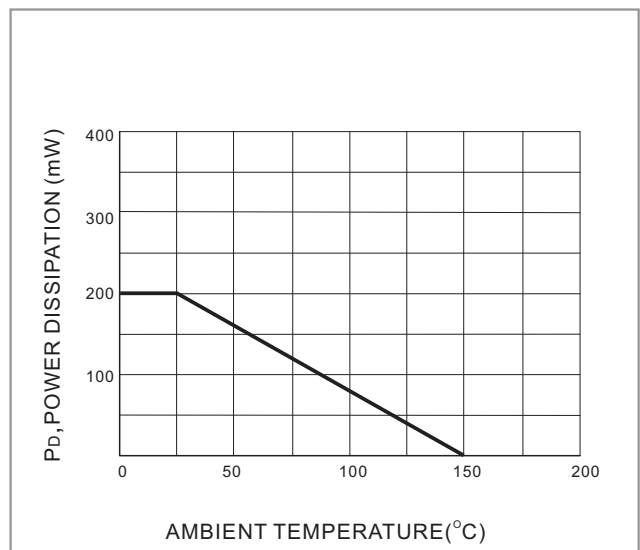
**Fig. 1 Typical Forward Characteristics**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

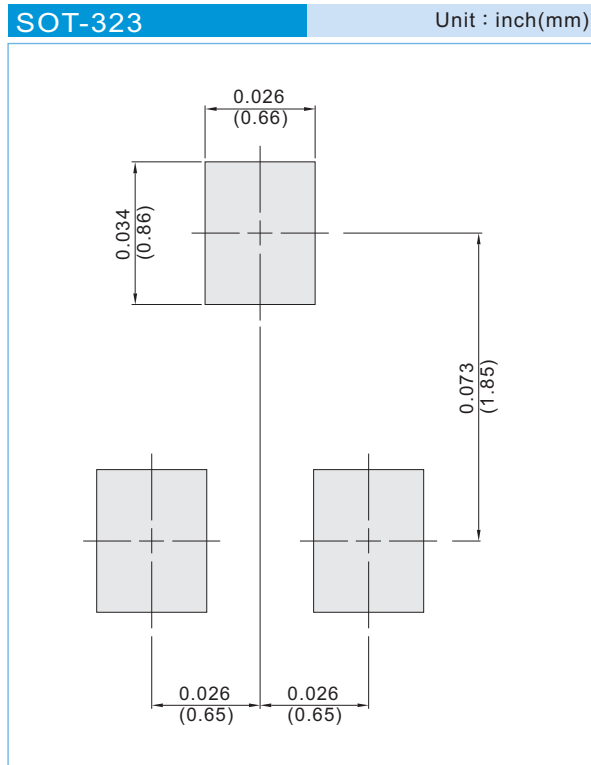


**FIG. 4 POWER DERATING CURVE**



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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 12K per 13" plastic Reel  
T/R - 3K per 7" plastic Reel



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### Part No\_packing code\_Version

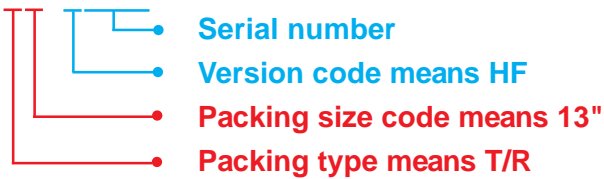
BAW56W\_R1\_00001

BAW56W\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.



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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