



# BAW56W,BAV70W,BAV99W,BAL99W

## SURFACE MOUNT SWITCHING DIODES

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

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

### FEATURES

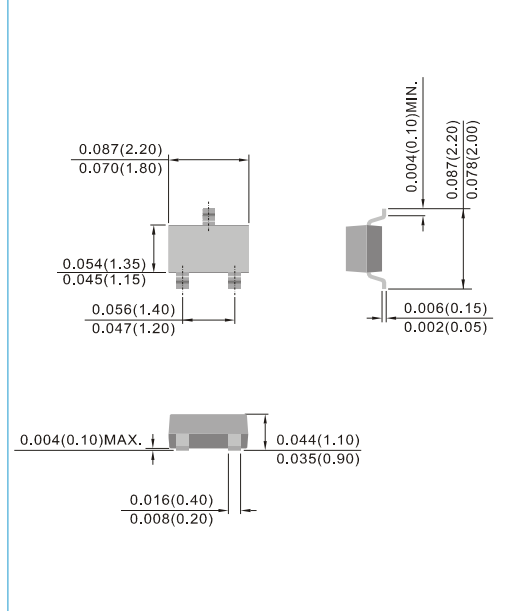
- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

Case: SOT-323, Plastic

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

Approx. Weight: 0.0002 Ounces, 0.005 Grams

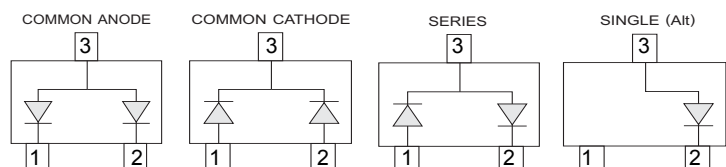


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

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)	

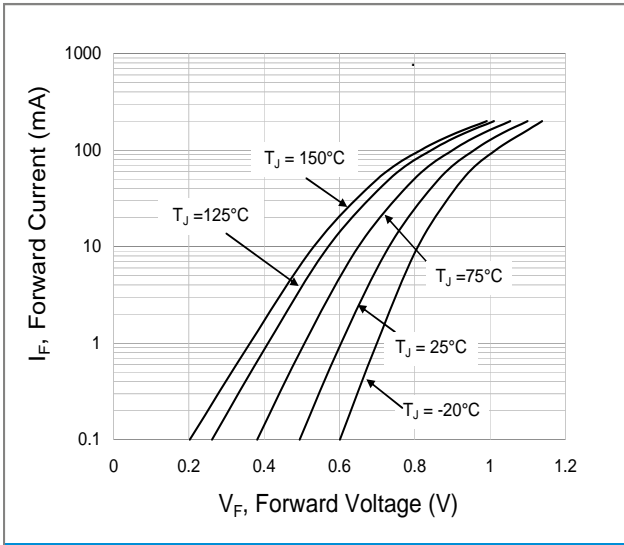
**NOTE:**

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.

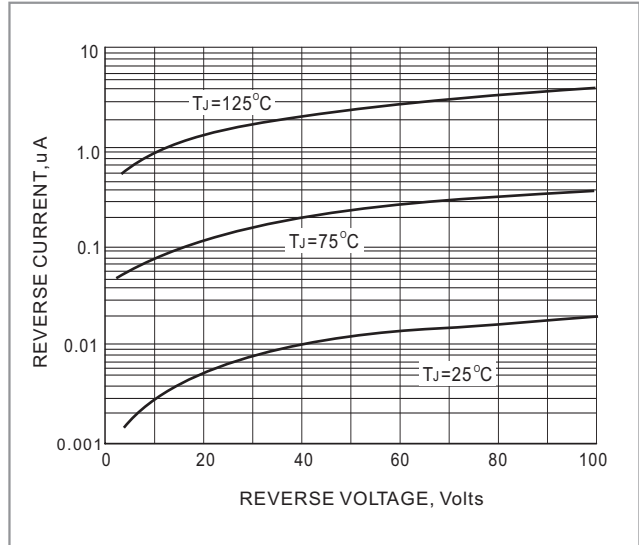




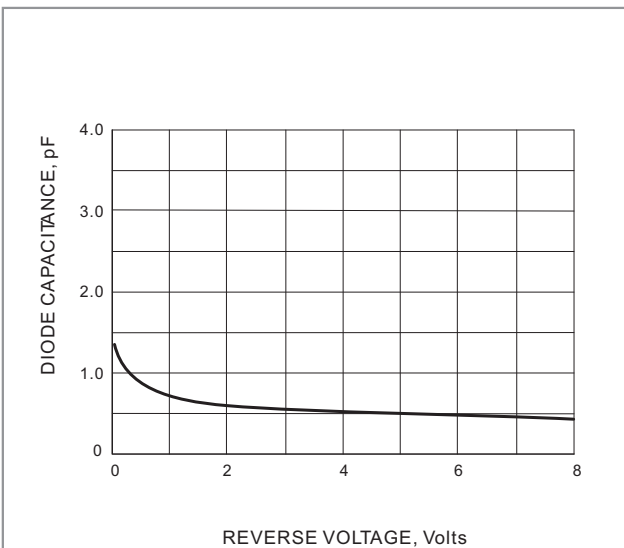
# BAW56W,BAV70W,BAV99W,BAL99W



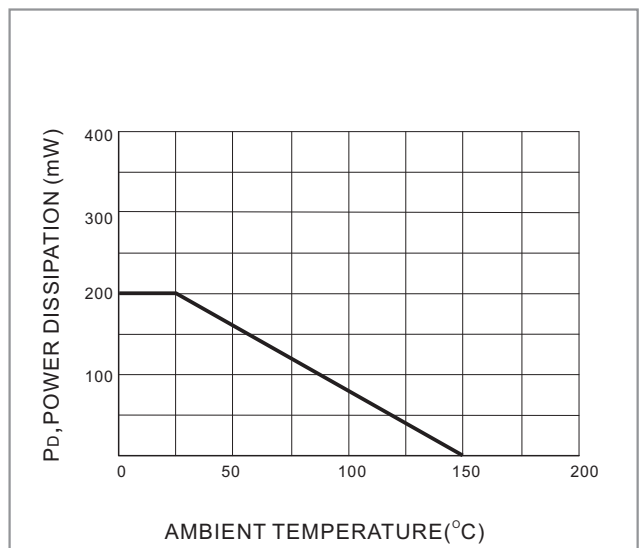
**Fig. 1 Typical Forward Characteristics**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

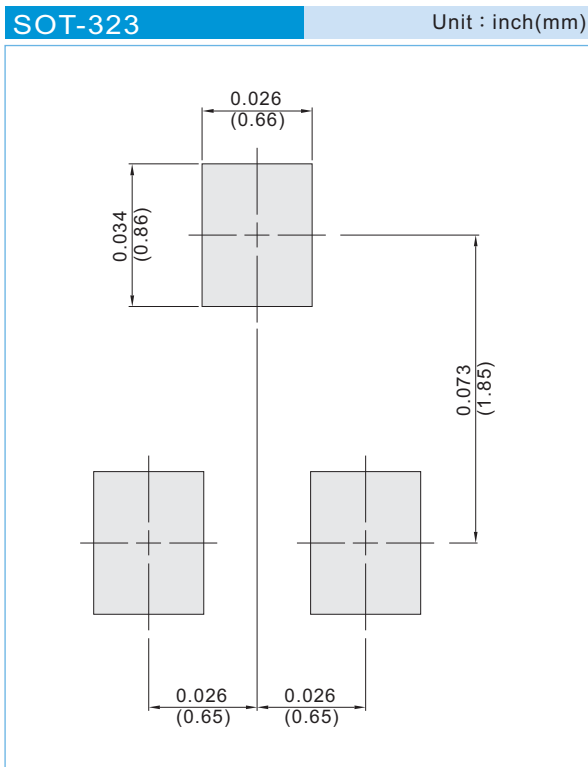


**FIG. 4 POWER DERATING CURVE**



# BAW56W,BAV70W,BAV99W,BAL99W

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2012

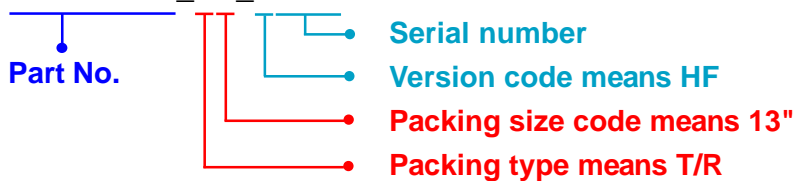
be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.



## BAW56W,BAV70W,BAV99W,BAL99W

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
T/B	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			

**Part No\_packing code\_Version**

BAW56W\_R1\_00001

BAW56W\_R2\_00001