



### **SURFACE MOUNT SWITCHING DIODES**

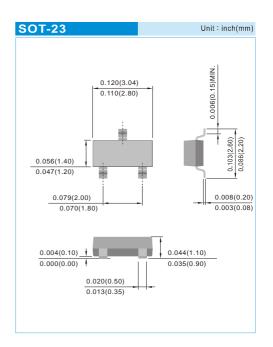
VOLTAGE 100 Volt POWER 250mWatt

### **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-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0003 ounces, 0.0084 grams



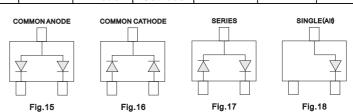
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAW56	BAV70	BAV99	BAL99	UNITS	
Marking Code	-	1C	JA	JB	JF	-	
Reverse Voltage	V <sub>R</sub>	75					
Peak Reverse Voltage	V <sub>RM</sub>	100					
Rectified Current (Average), Half Wave Rectification with Resistive Load and f ≥50 Hz	I o	150					
Peak Forward Surge Current,0.001ms	I <sub>FSM</sub>	4.0					
Power Dissipation Derate Above 25°C	Ртот	250					
Maximum Forward Voltage	V <sub>F</sub>	0.715 @ I F=1mA 0.855 @ I F=10mA 1.0 @ I F=50mA 1.25 @ I F=150mA					
Maximum DC Reverse Current at 25V 75V	I <sub>R</sub>	0.03 2.5					
Maximum Junction Capacitance (Notes 1)	CJ	1.5					
Maximum Reverse Recovery Time (Notes 2)	t <sub>rr</sub>	4.0					
Typical Thermal Resistance	$R_{_{ heta JA}}$ $R_{_{ heta JC}}$	360 205					
Junction Temperature Range	T	-55 to +150					
Circuit Figure	-	Common Anode	Common Cathode	Series	Single(Alt)	-	

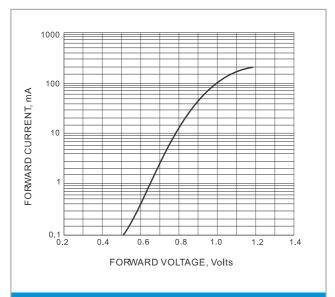
#### NOTE:

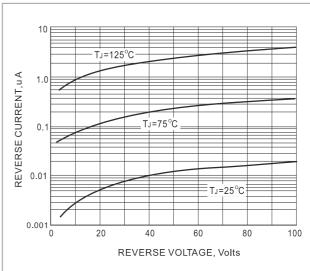
- 1. CJ at VR=0, f=1MHz
- 2.From I==10mA to IR=1mA, VR=6Volts, RL=100 $\Omega$





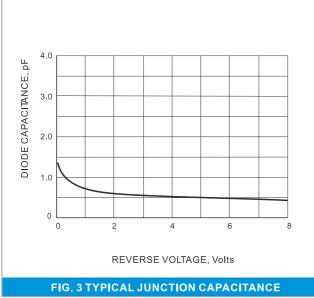


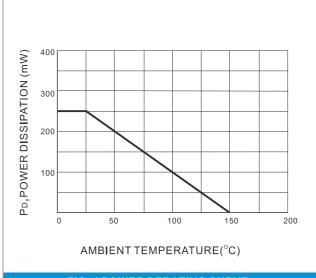




### FIG. 1-TYPICAL FORWARD CHARACTERISTIC





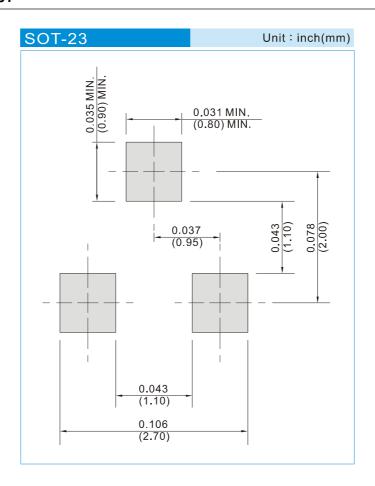


G. 3 TYPICAL JUNCTION CAPACITANCE FIG. 4 POWER DERATING CURVE





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





## Part No\_packing code\_Version

BAW56\_R1\_00001 BAW56\_R2\_00001

## For example:



Packing Code XX				Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	X				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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