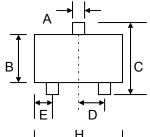


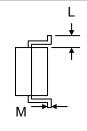
# SURFACE MOUNT FAST SWITCHING DIODE



#### **Features**

- **Dual Diode Common Anode**
- Fast Switching
- Surface Mount Package Ideally Suited for **Automatic Insertion**
- For General Purpose Switching Applications
- Plastic Material UL Recognition Flammability Classification 94V-0





# **Mechanical Data** Case: SOT-23, Molded Plastic Terminals: Plated Leads Solderable per

SOT-23				
Dim	Min	Max		
Α	0.37	0.51		
В	1.19	1.40		
С	2.10	2.50		
D	0.89	1.05		
E	0.45	0.61		
G	1.78	2.05		
Н	2.65	3.05		
J	0.013	0.15		
K	0.89	1.10		
L	0.45	0.61		
М	0.076	0.178		
All Dimensions in mm				

MIL-STD-202, Method 208

Polarity: See Diagram

Weight: 0.008 grams (approx.)

Mounting Position: Any

Marking: Device Code, See Page 3

Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4

# Maximum Ratings @TA=25°C unless otherwise specified

Characteristic		Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage		Vrsm	100	٧
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	75	V
Forward Continuous Current		lF	200	mA
Repetitive Peak Forward Current		IFRM	450	mA
Non-Repetitive Peak Forward Surge Current	@ t = 1.0µs @ t = 1.0s	IFSM	2.0 1.0	А
Operating and Storage Temperature Range		ТJ, Tsтg	-55 to +150	°C

#### **Thermal Characteristics**

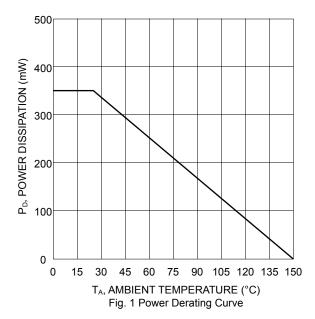
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	PD	350	mW
Thermal Resistance, Junction to Ambient (Note 1)	R JA	357	°C/W

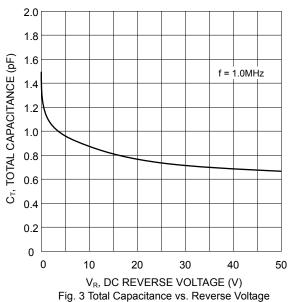
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

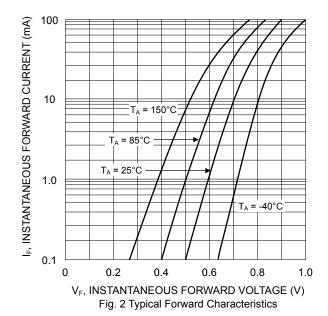


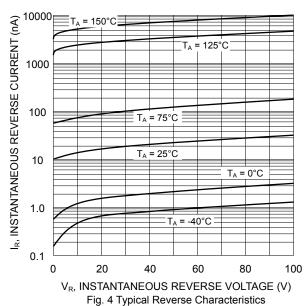
## Electrical Characteristics @TA=25°C unless otherwise specified

Characteristic		Symbol	Min.	Тур.	Max.	Unit
Reverse Breakdown Voltage	@ IR = 2.5μA	V(BR)	75			V
Forward Voltage Drop	@ IF = 1.0mA @ IF = 10mA @ IF = 50mA @ IF = 150mA	VFM			0.715 0.855 1.0 1.25	V
Peak Reverse Leakage Current	@ VR = 75V, TJ = 25°C @ VR = 25V, TJ = 150°C @ VR = 75V, TJ = 150°C	Irm			2.5 30 50	μΑ
Diode Capacitance (VR = 0V, f = 1.0MHz)		C <sub>D</sub>			2.0	pF
Reverse Recovery Time (IF = IR = 10mA, IRR = 0.1 x IR, RL = 100Ω)		trr			6.0	nS





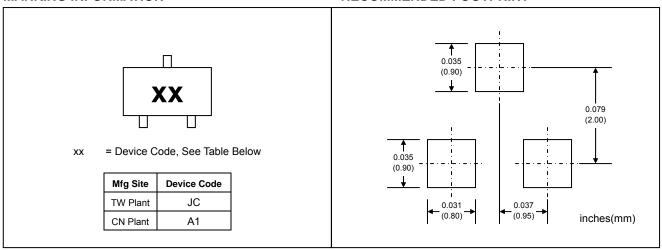




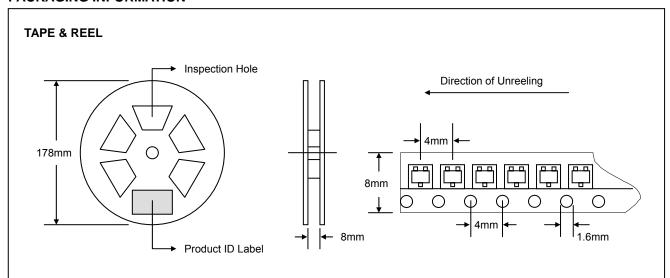


### **MARKING INFORMATION**

### RECOMMENDED FOOTPRINT



#### **PACKAGING INFORMATION**



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.

2. Components are packed in accordance with EIA standard 481-1 and 481-2.



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
BAW56-T1	SOT-23	3000/Tape & Reel

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, BAW56-T1-LF.

WON-TOP ELECTRONICS and are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd. No. 44 Yu Kang North 3rd Road,

Chine Chen Dist., Kaohsiung 806, Taiwan **Phone:** 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

We power your everyday.