

# BAW56T

## SURFACE MOUNT FAST SWITCHING DIODE

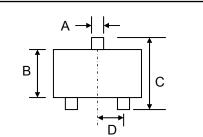


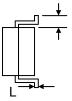
## **Features**

- 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

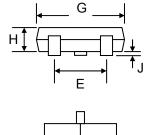


- Case: SOT-523, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.002 grams (approx.)
- Mounting Position: Any
- Marking: JD
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4





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SOT-523				
Dim	Min	Max		
Α	0.15	0.30		
В	0.75	0.85		
С	1.45 1.75			
D	0.50 Typical			
ш	0.90	1.10		
G	1.50	1.70		
Н	0.60	0.80		
J	0.02	0.10		
к	0.10	0.30		
L	0.10	0.20		
All Dimensions in mm				

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

Characteristic		Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage		Vrsm	100	V
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	4.0 0.5	А
Operating and Storage Temperature Range		TJ, TSTG	-55 to +150	°C

# **Thermal Characteristics**

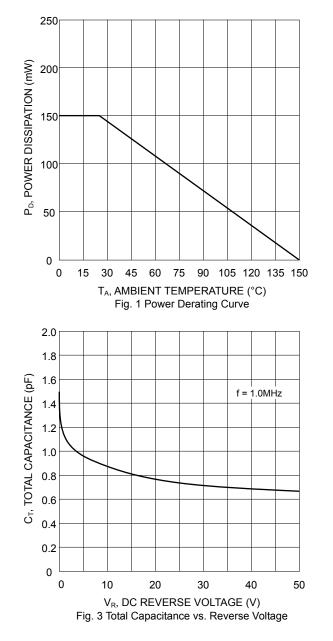
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	PD	150	mW
Thermal Resistance, Junction to Ambient (Note 1)	R ja	833	°C/W

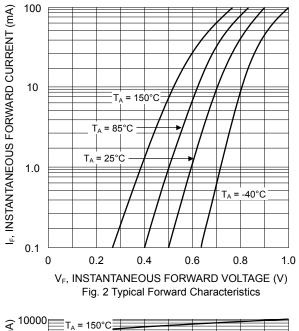
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

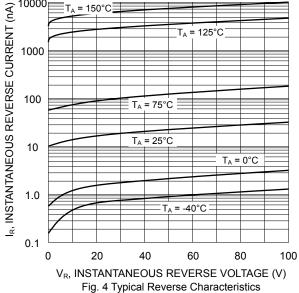


# **Electrical Characteristics** $@T_A=25^{\circ}C$ unless otherwise specified

Characteristic		Symbol	Min.	Тур.	Max.	Unit
Reverse Breakdown Voltage	@ IR = 100µA	V(BR)	75			V
Forward Voltage Drop Peak Reverse Leakage Current	@ IF = 1.0mA @ IF = 10mA @ IF = 50mA @ IF = 150mA @ VR = 75V, TJ = 25°C	Vfm			0.715 0.855 1.0 1.25 2.0	V
	@ VR = 25V, TJ = 150°C @ VR = 75V, TJ = 150°C	IRM			60 100	μA
Diode Capacitance (VR = 0V, f = 1.0MHz)		CD			2.0	pF
Reverse Recovery Time (IF = IR = 10mA, IRR = 0.1 x IR, RL = 100 $\Omega$ )		trr			6.0	nS

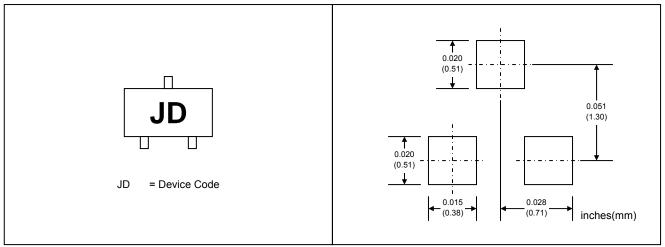






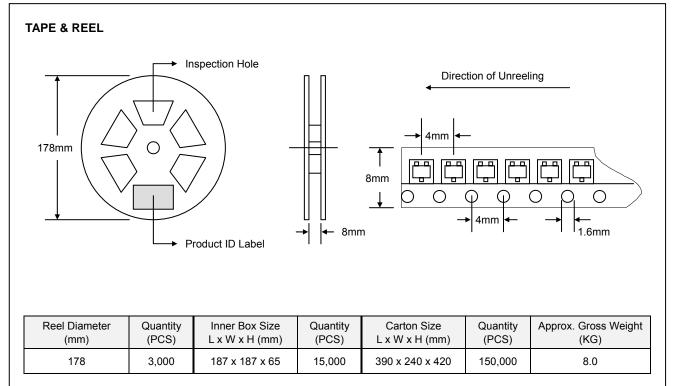


#### MARKING INFORMATION



**RECOMMENDED FOOTPRINT** 

### PACKAGING INFORMATION



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
BAW56T-T1	SOT-523	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

2. To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, BAW56T-T1-LF.

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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

