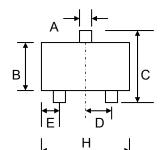


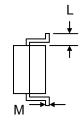
# SURFACE MOUNT FAST SWITCHING DIODE



### **Features**

- Dual Diode Common Cathode
- 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 MIL-STD-202, Method 208

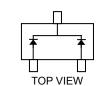
Polarity: See Diagram

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



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				

## 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	٧
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	Α
Operating and Storage Temperature Range		TJ, TSTG	-55 to +150	°C

### **Thermal Characteristics**

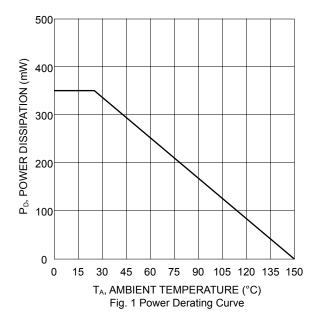
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	PD	350	mW
Thermal Resistance, Junction to Ambient (Note 1)	R JA	357	°C/W

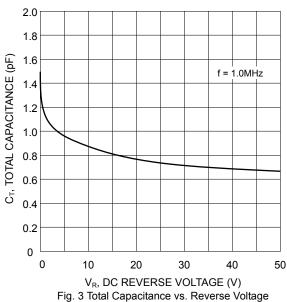
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

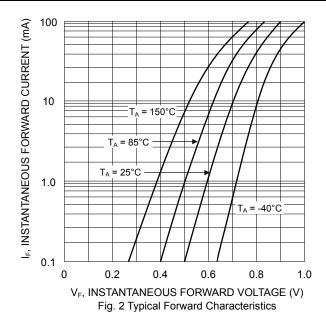


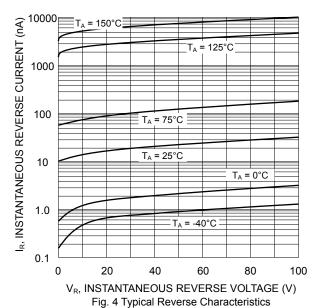
# Electrical Characteristics @TA=25°C unless otherwise specified

Characte	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>			1.5	pF
Reverse Recovery Time (IF = IR = 10mA, IRR = 0.1 x IR, RL = 100Ω)		trr			6.0	nS





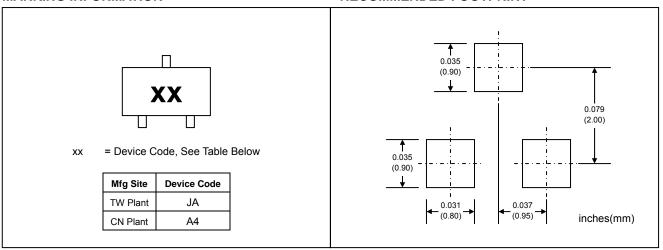




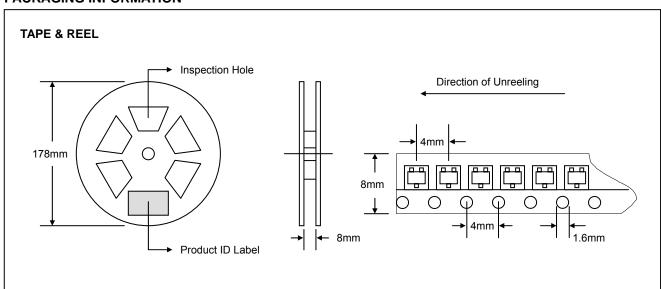


## **MARKING INFORMATION**

## 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
BAV70-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, BAV70-T1-LF.

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**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.

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