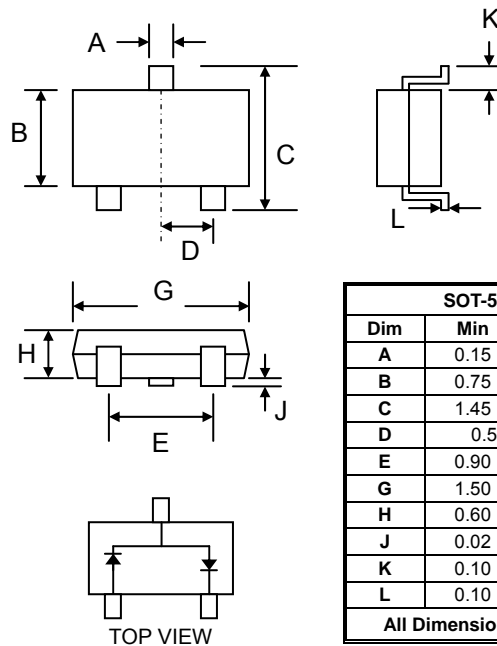


### Features

- Dual Diode Series
- 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-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: JE
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

SOT-523		
Dim	Min	Max
A	0.15	0.30
B	0.75	0.85
C	1.45	1.75
D	0.50 Typical	
E	0.90	1.10
G	1.50	1.70
H	0.60	0.80
J	0.02	0.10
K	0.10	0.30
L	0.10	0.20
All Dimensions in mm		

### Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
Forward Continuous Current	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	2.0 0.5	A
	@ $t = 1.0\mu\text{s}$ @ $t = 1.0\text{s}$		
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

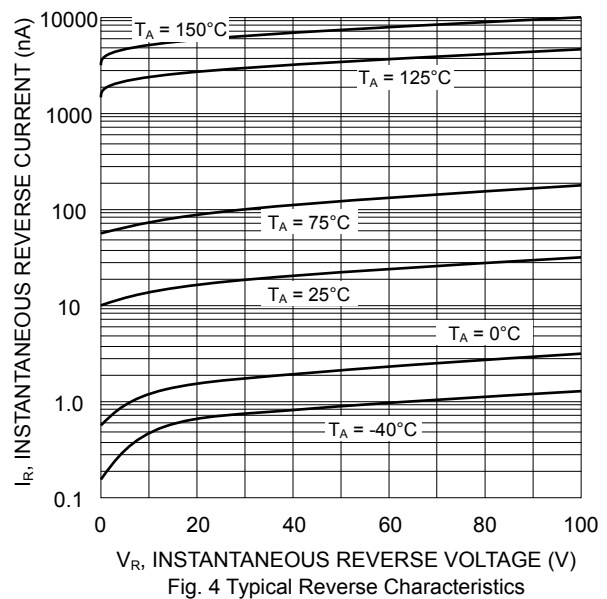
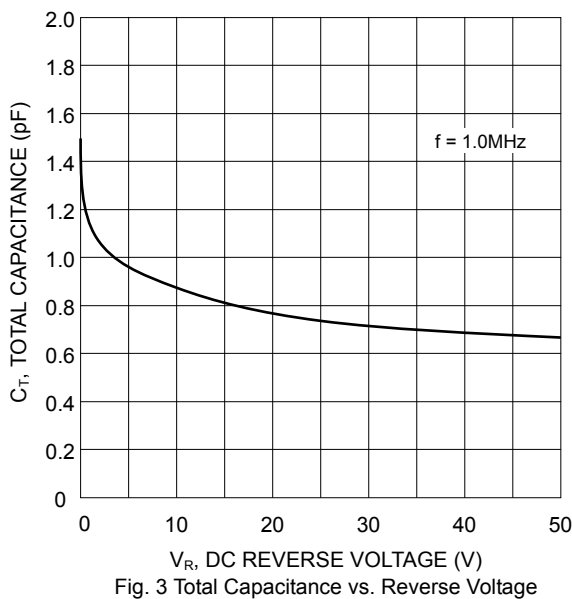
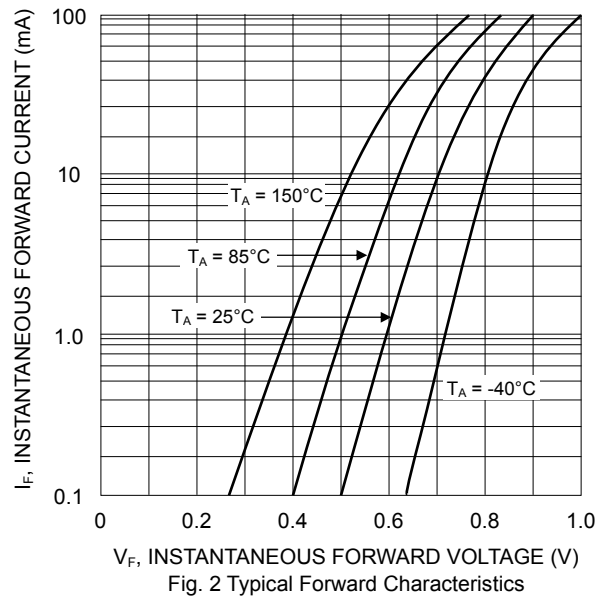
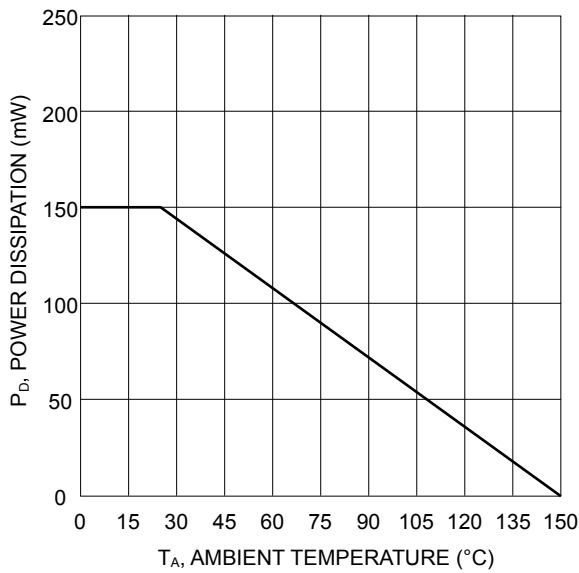
### Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	$P_D$	150	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{JA}$	833	$^\circ\text{C/W}$

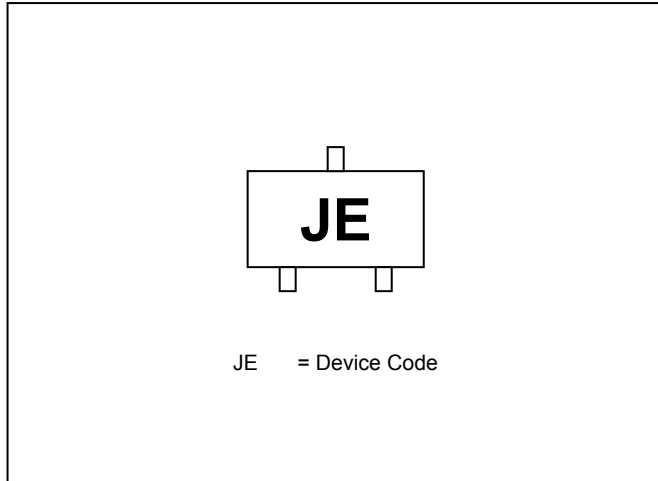
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

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

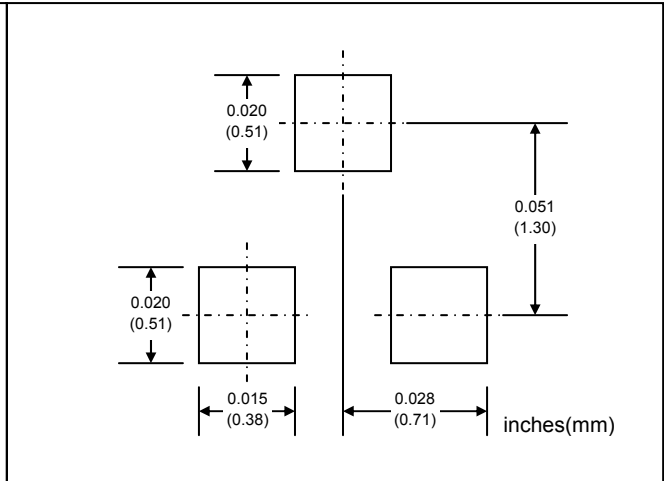
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage @ $I_R = 100\mu\text{A}$	$V_{(BR)}$	75			V
Forward Voltage Drop @ $I_F = 1.0\text{mA}$ @ $I_F = 10\text{mA}$ @ $I_F = 50\text{mA}$ @ $I_F = 150\text{mA}$	$V_{FM}$			0.715 0.855 1.0 1.25	V
Peak Reverse Leakage Current @ $V_R = 75\text{V}, T_J = 25^\circ\text{C}$ @ $V_R = 25\text{V}, T_J = 150^\circ\text{C}$ @ $V_R = 75\text{V}, T_J = 150^\circ\text{C}$	$I_{RM}$			2.0 60 100	$\mu\text{A}$
Diode Capacitance ( $V_R = 0\text{V}, f = 1.0\text{MHz}$ )	$C_D$			1.5	pF
Reverse Recovery Time ( $I_F = I_R = 10\text{mA}, I_{RR} = 0.1 \times I_R, R_L = 100\Omega$ )	$t_{rr}$			4.0	nS



## MARKING INFORMATION

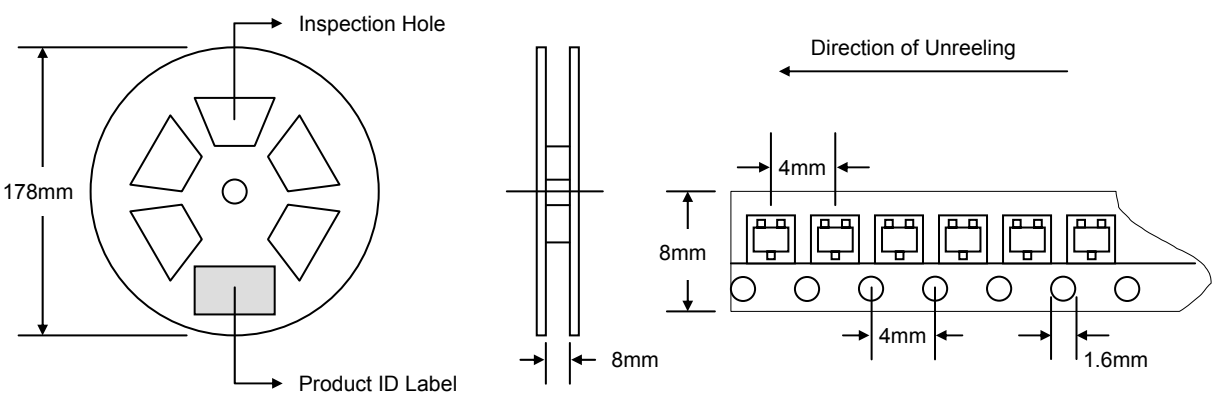


## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

### TAPE & REEL




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	8.0

**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
BAV99T-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, BAV99T-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>

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