

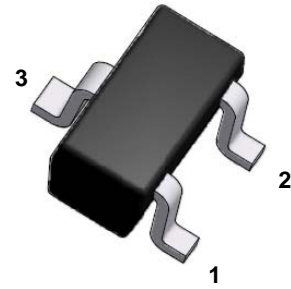


DATA SHEET

SEMICONDUCTOR

BAV99T

150mW SOT-523 SURFACE MOUNT Plastic Package Fast Switching Diode



SOT-523

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

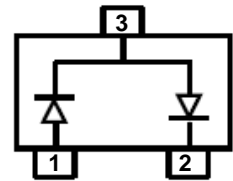
Symbol	Parameter	Value	Units
P_D	Power Dissipation	150	mW
T_{STG}	Storage Temperature Range	-55 to +125	$^\circ\text{C}$
T_J	Operating Junction Temperature	+125	$^\circ\text{C}$
V_R	Reverse Voltage	85	V
I_{FO}	Forward Current	75	mA

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- Fast Switching Device
- General Purpose Diodes
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish

Electrical Symbol & Marking Codes:



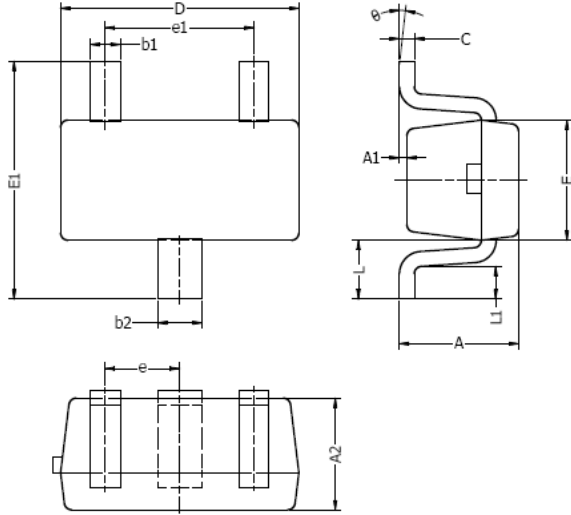
BAV99T
Marking: JE

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

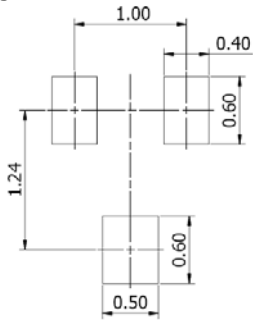
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
V_{BR}	Reverse Breakdown Voltage	$I_R=1\mu\text{A}$	85		Volts
I_R	Reverse Leakage Current	$V_{R1}=75\text{V}$ $V_{R2}=25\text{V}$		2 0.03	μA
V_F	Forward Voltage	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		0.715 0.855 1.00 1.25	Volts
C_D	Diode Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$		1.5	pF
T_{rr}	Reverse Recovery Time	$I_F=I_R=10\text{mA}$ $I_{RR}=0.1 \times I_R$, $R_L=100\Omega$		4	ns

PACKAGE OUTLINE & DIMENSIONS

BAV99T



Typical Soldering Pattern:



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.70	0.90	0.028	0.035
A1	0.00	0.10	0.000	0.004
A2	0.70	0.80	0.028	0.031
b1	0.15	0.25	0.006	0.010
b2	0.25	0.35	0.010	0.014
c	0.10	0.20	0.004	0.008
D	1.50	1.70	0.059	0.067
E	0.70	0.90	0.028	0.035
E1	1.45	1.75	0.057	0.069
e	0.50 TYP.		0.020 TYP.	
e1	0.90	1.10	0.035	0.043
L	0.40 REF.		0.016 REF.	
L1	0.10	0.30	0.004	0.012
θ	0°	8°	0°	8°

NOTES:

1. Above package outline conforms to JEITA EAIJ ED-7500A SC-75A.
2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.