



SEMICONDUCTOR

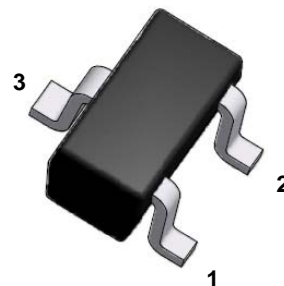
## DATA SHEET

BAW56T

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

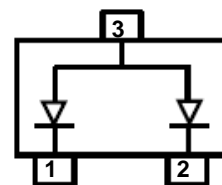
These ratings are limiting values above which the serviceability of the diode may be impaired.



SOT-523

**Specification Features:**

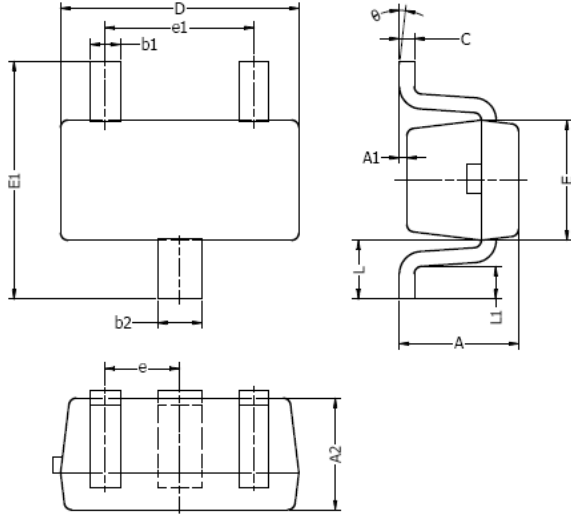
- Fast Switching Device
- General Purpose Diodes
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish

**Electrical Symbol & Marking Codes:****BAW56T**  
**Marking: JD****Electrical Characteristics**  $T_A = 25^\circ\text{C}$  unless otherwise noted

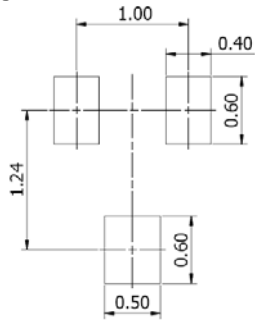
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$V_{BR}$	Reverse Breakdown Voltage	$I_R=1\mu\text{A}$	85		Volts
$I_R$	Reverse Leakage Current	$V_{R1}=75\text{V}$ $V_{R2}=25\text{V}$		2 0.03	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		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

## BAW56T



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.