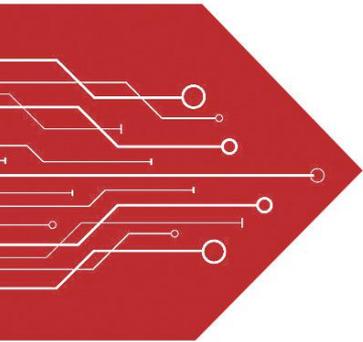


# MSKSEMI

SEMICONDUCTOR



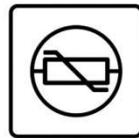
ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

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

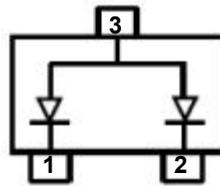
Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	150	mW
$T_{STG}$	Storage Temperature Range	-55 to +125	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+125	$^\circ\text{C}$
$V_R$	Reverse Voltage	85	V
$I_{FO}$	Forward Current	75	mA

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

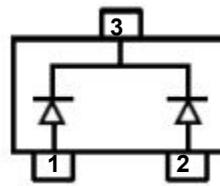
**FEATURES**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

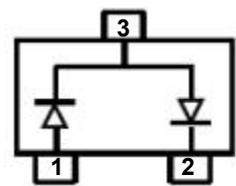
**Electrical Symbol & Marking Codes:**



**BAW56T-MS**  
Marking: JD



**BAV70T-MS**  
Marking: JJ

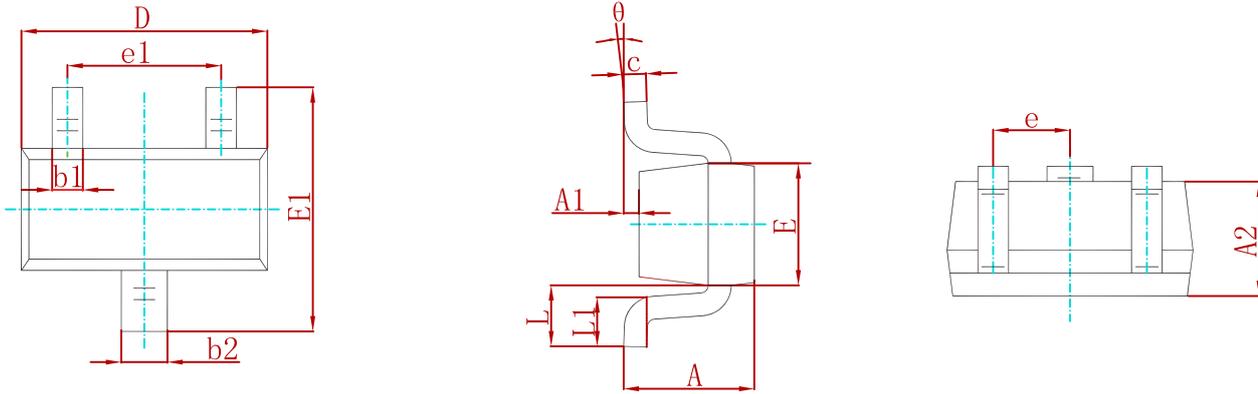


**BAV99T-MS**  
Marking: JE

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

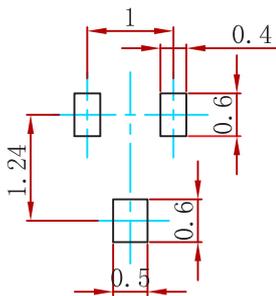
Symbol	Parameter	Test Condition	Limits			Unit
			Min	Typical	Max	
$V_{BR}$	Reverse Breakdown Voltage	$I_R=1\mu\text{A}$	85			Volts
$I_R$	Reverse Leakage Current	$V_{R1}=75\text{V}$ $V_{R2}=25\text{V}$			2 0.03	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$			0.715 0.855 1.00 1.25	Volts
$C_D$	Diode Capacitance	$V_R=0\text{V}$ , $f=1\text{MHz}$		1.5	4	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 MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance: ±0.05mm.
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAXXXT-MS	SOT-523	3000

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