



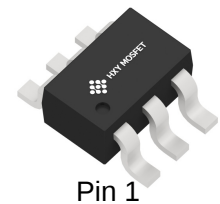
Features

Fast Switching Speed.

High Conductance.

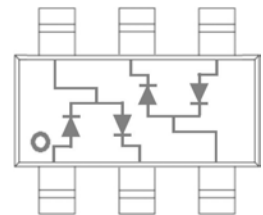
For General Purpose Switching Applications.

Surface Mount Package Ideally Suited for Automatic Insertion.



Pin 1

SOT-363



Pin 1

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAV99S,115	SOT-363	K1	3000

Maximum Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	75	V
V_{RRM}	Reverse Voltage	85	V
I_F	Forward Current	150	mA
I_{FRM}	Repetitive Peak Forward Current	0.45	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	2.5	A
P_d	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	°C/W
T_J	Operation Junction Temperature Range	-40~+150	°C
T_{STG}	Storage Temperature Range	-55~+150	°C

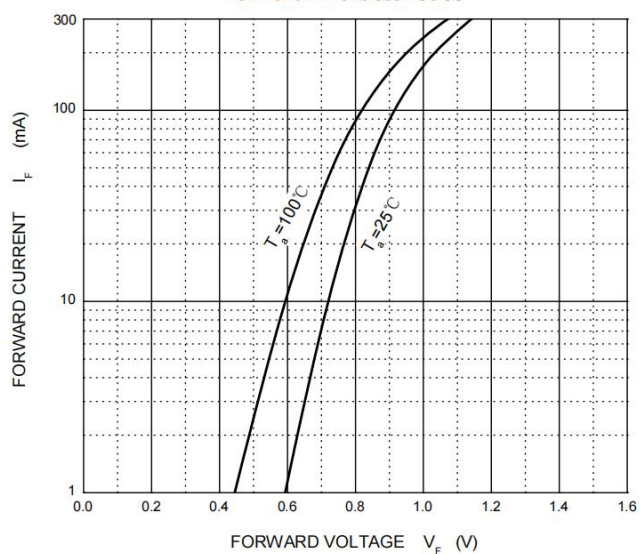
Electrical Characteristics (Ta=25 unless otherwise noted)

Symbol	Parameter	Test conditions	Min	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu A$	70		V
I_R	Reverse current	$V_R=75V$		1	μA
V_F	Forward voltage	$I_F=1mA$		0.715	V
		$I_F=10mA$		0.855	V
		$I_F=50mA$		1	V
		$I_F=150mA$		1.25	V
C_T	Capacitance between terminals	$V_R=0V, f=1MHz$		1.5	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$		6	nS

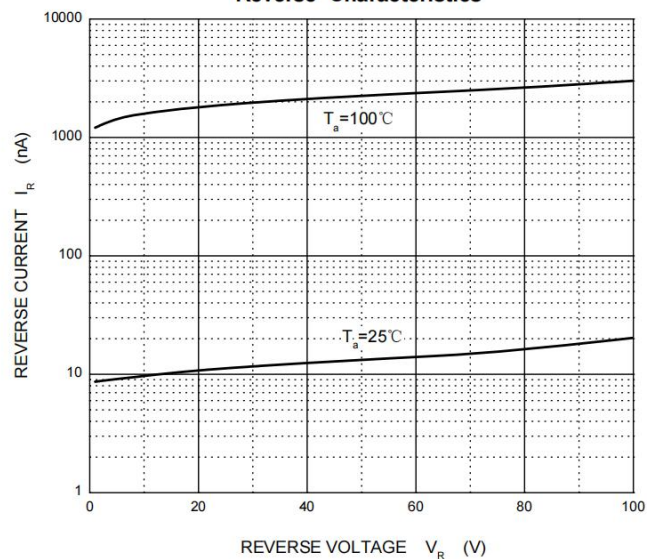


Typical Characteristics

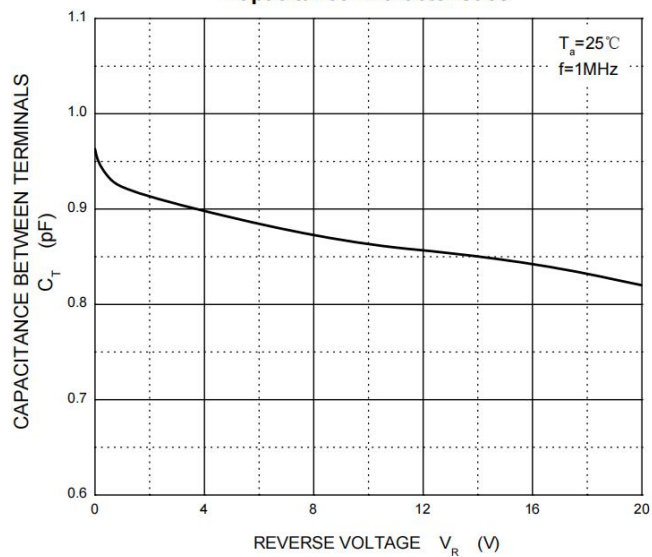
Forward Characteristics



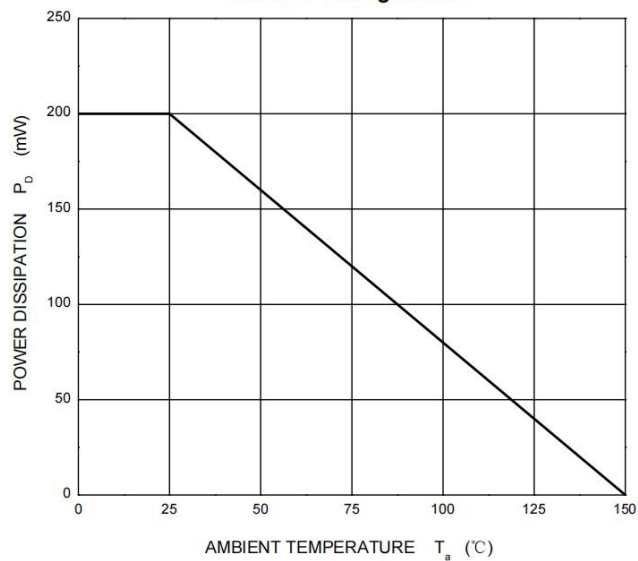
Reverse Characteristics



Capacitance Characteristics

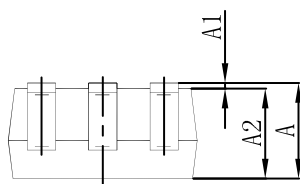
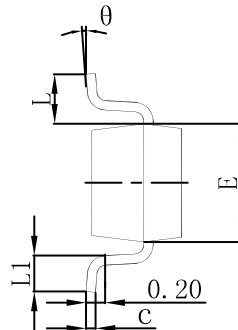
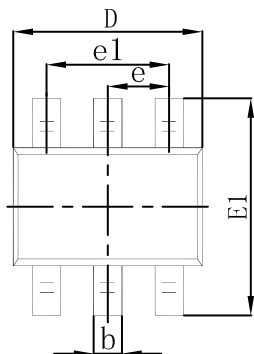


Power Derating Curve



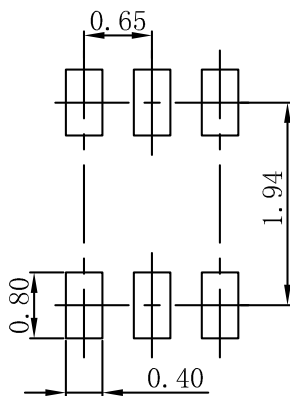


SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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