



**GP**  
**ELECTRONICS**

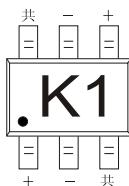
**BAV99S**

**Switching Diodes**

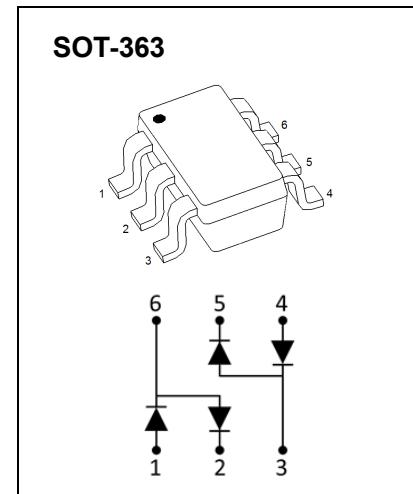
## FEATURES

- Small Plastic Package
- High Switching Speed
- Low Capacitance
- Two Electrically Isolated Series Configuration Arrays

## MARKING: K1



Solid dot = Pin1 indicate.



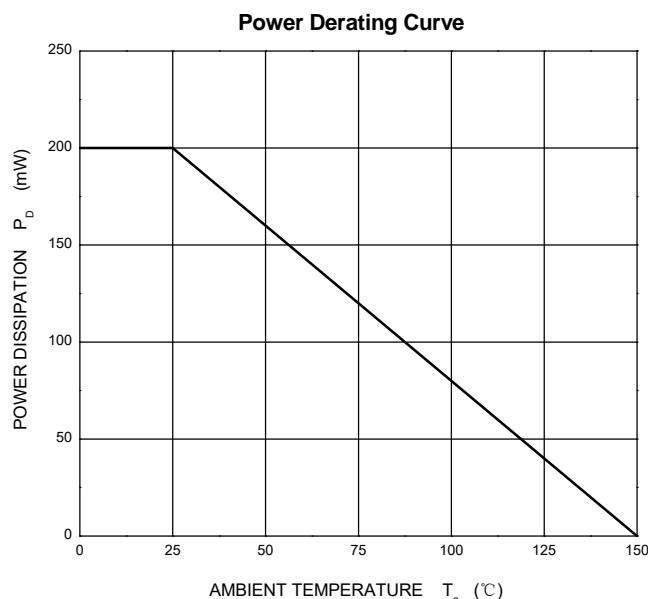
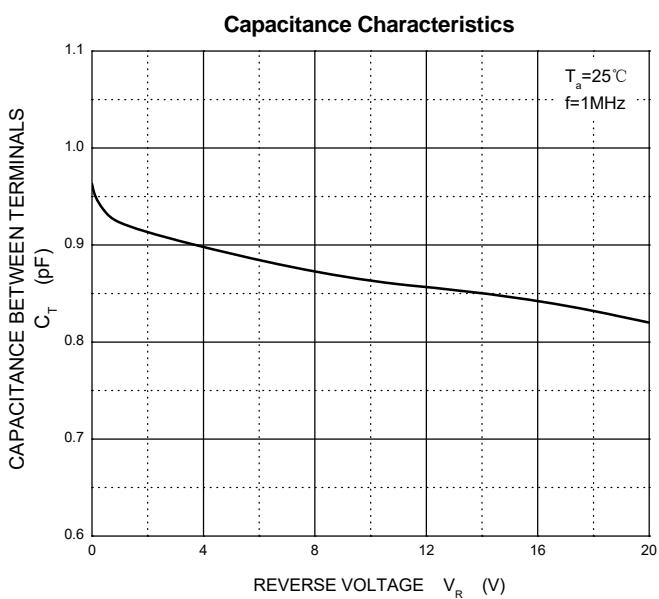
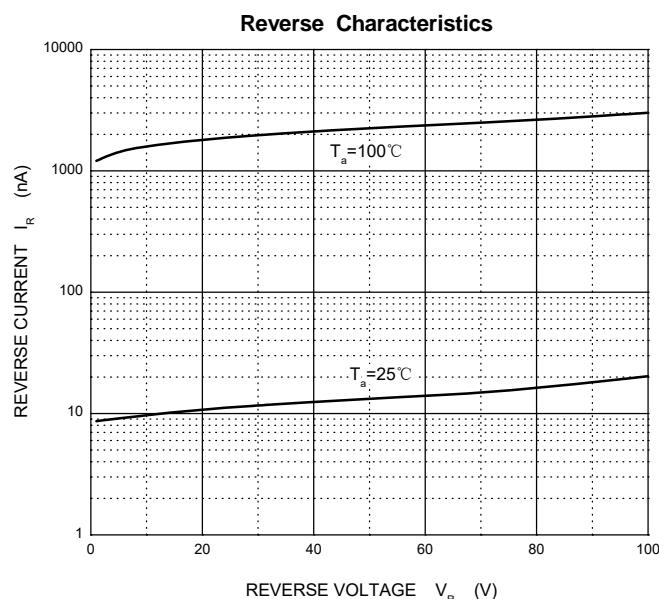
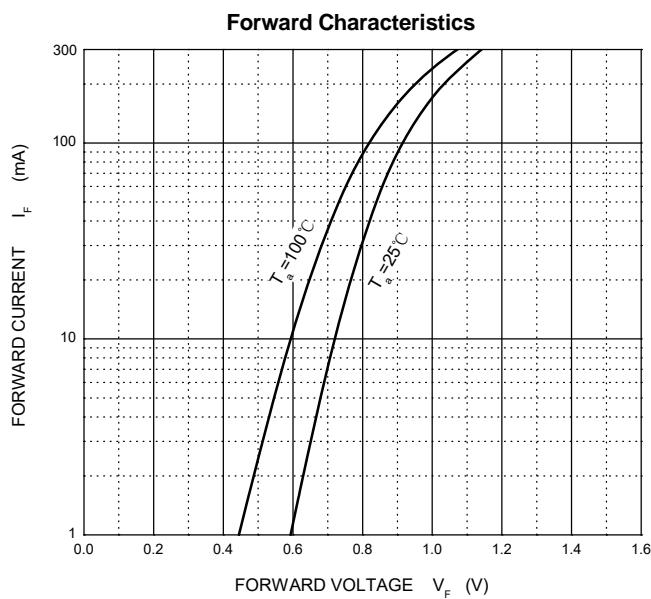
## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted )

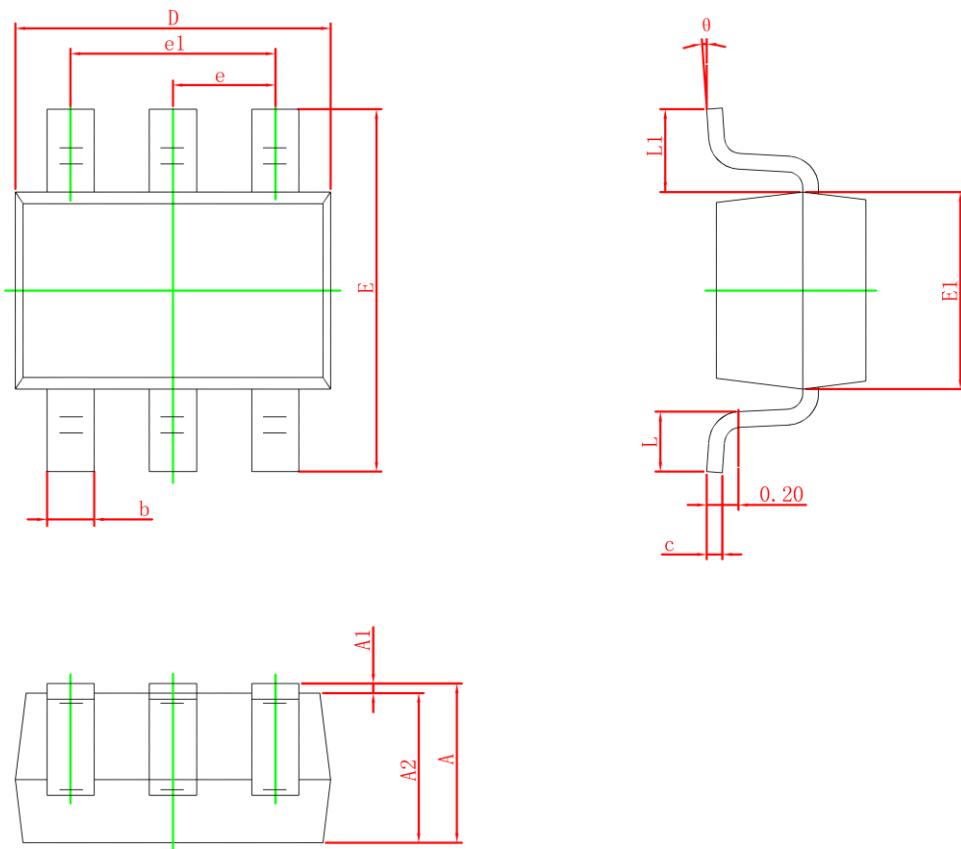
Symbol	Parameter	Limits	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	85	V
$V_R$	Reverse Voltage	75	V
$I_F$	Forward Current	150	mA
$I_{FRM}$	Repetitive Peak Forward Current	450	
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.5	A
$P_D$	Power Dissipation	200	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	625	$^\circ\text{C/W}$
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	$I_R$	$V_R=75\text{V}$			1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	$C_{tot}$	$V_R=0, f=1\text{MHz}$			1.5	pF
Reverse recovery time	$t_{rr}$	$I_F= I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			6	ns

## Typical Electrical and Thermal Characteristics



**SOT-363 Package Information**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.000	0.035	0.039
A1	0	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	0.080	0.150	0.003	0.006
D	1.800	2.200	0.071	0.087
E	2.000	2.450	0.079	0.096
E1	1.150	1.350	0.045	0.053
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L1	0.525REF		0.021REF	
L	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°