

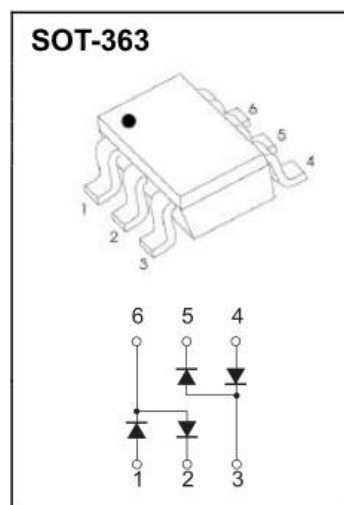
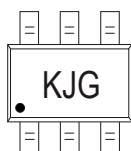
## SOT-363 Plastic-Encapsulate Diode

### BAV99DW SWITCHING DIODE

#### FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- Halogen-free, RoHS Compliant
- Ultra-Small Surface Mount Package

#### MARKING: KJG



#### Maximum Ratings @Ta=25°C

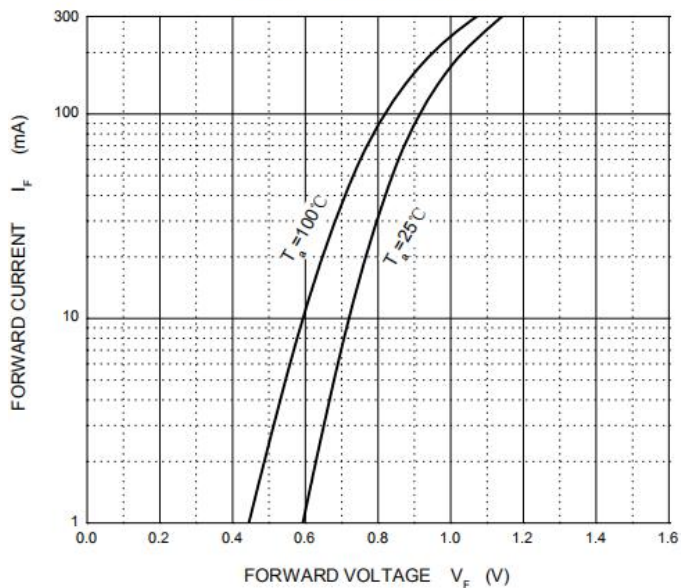
Parameter	Symbol	Limit	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$	75	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction Temperature	$T_J$	-55~+150	°C
Storage Temperature range	$T_{STG}$	-55~+150	°C

#### Electrical Characteristics @Ta=25°C

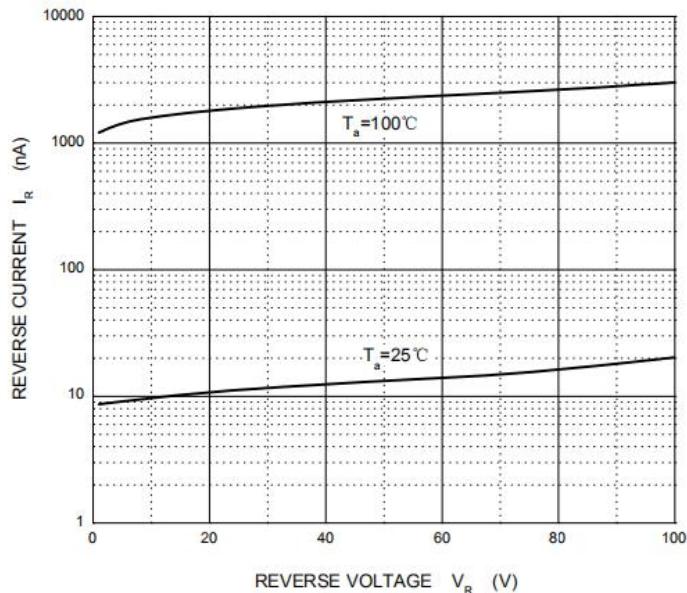
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=2.5\mu A$	5		V
Reverse voltage leakage current	$I_{R1}$	$V_R=75V$		50	nA
	$I_{R2}$	$V_R=20V$		25	nA
Forward voltage	$V_F$	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		0.715 0.855 1.00 1.25	V
Diode capacitance	$C_D$	$V_R=0$ $f=1MHz$		6	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	ns

## Typical Characteristics

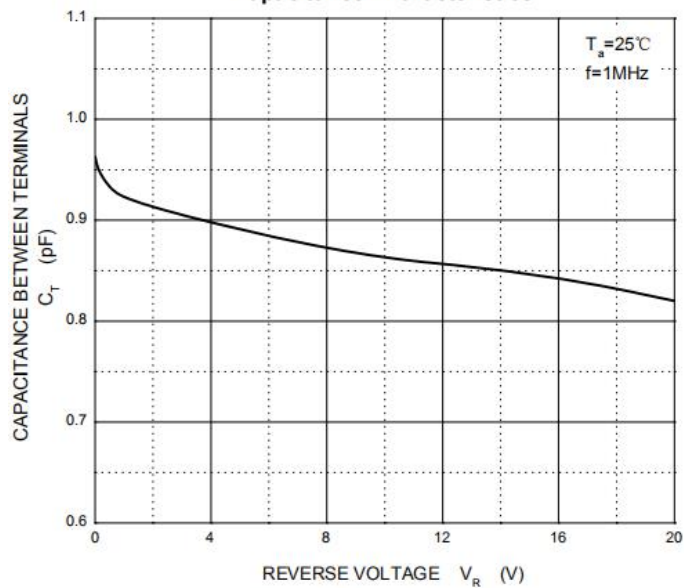
### Forward Characteristics



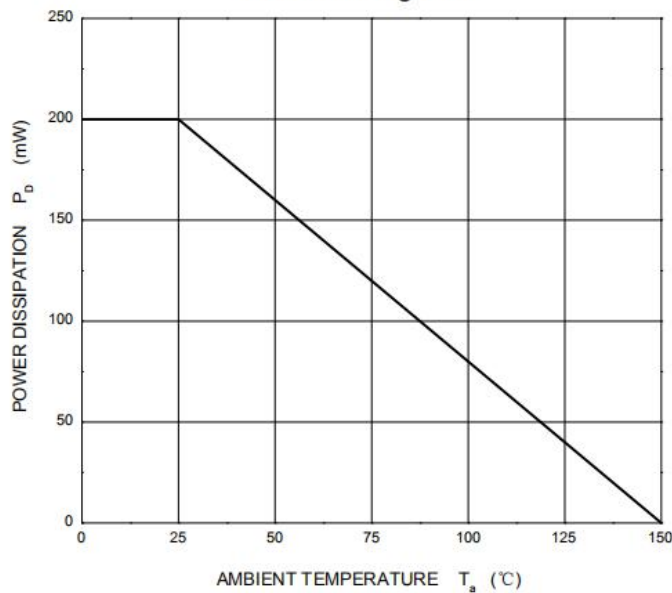
### Reverse Characteristics



### Capacitance Characteristics

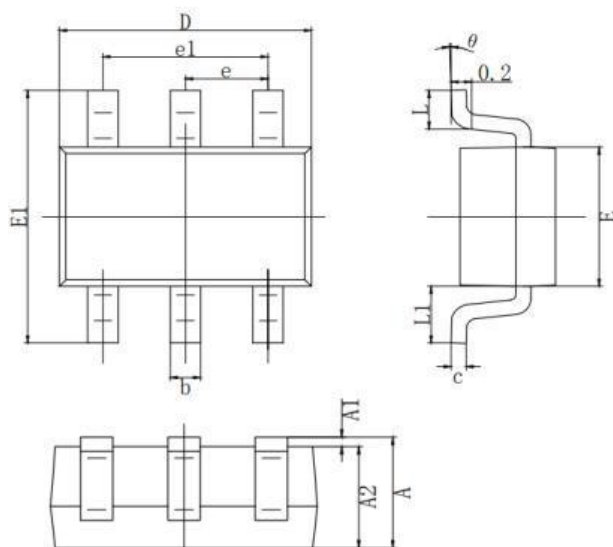


### Power Derating Curve



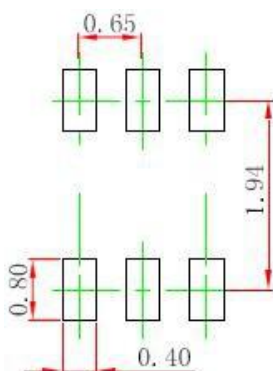
## Outline Drawing

### SOT-363 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
$\theta$	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.