

# SOT-363 Plastic-Encapsulate Diodes

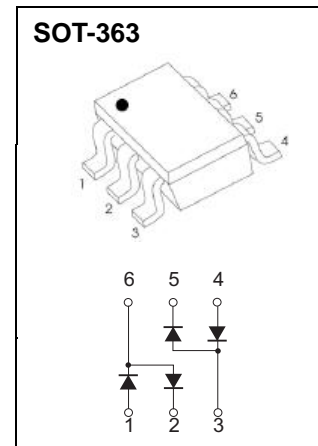
## BAV99DW SWITCHING DIODE

### FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance

### MAKING: KJG

### Maximum Ratings @Ta=25°C



Parameter	Symbol	Limit	Unit	
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V	
Working Peak Reverse Voltage	$V_{RWM}$			
DC Blocking Voltage	$V_R$			
Forward Continuous Current	$I_{FM}$	300	mA	
Average Rectified Output Current	$I_O$	150	mA	
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	@ t = 1.0μs	2	A
		@ t = 1.0s	1	
Power Dissipation	$P_D$	200	mW	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C/W	
Operating Junction Temperature	$T_J$	150	°C	
Storage Temperature	$T_{STG}$	-55~+150	°C	

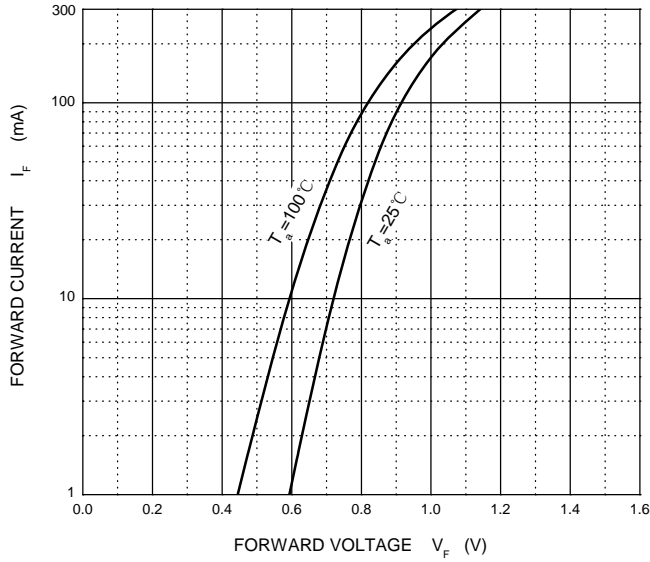
### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 2.5\mu A$	75		V
Reverse voltage leakage current	$I_R$	$V_R = 75V$ $V_R = 20V$		2.5 0.025	μA
Forward voltage	$V_F$	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$		715 855 1000 1250	mV
Junction capacitance	$C_T$	$V_R = 0, f = 1MHz$		2	pF
Reveres recovery time	$t_{rr}$	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$		4	ns

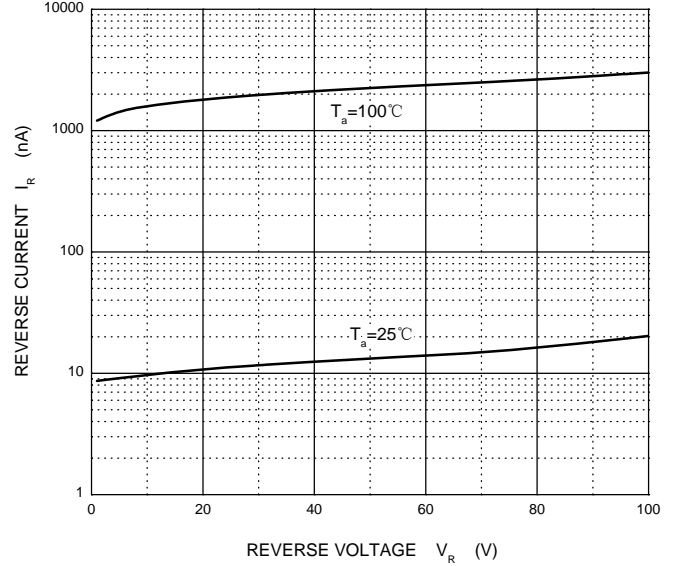
# BAV99DW

## Typical Characteristics

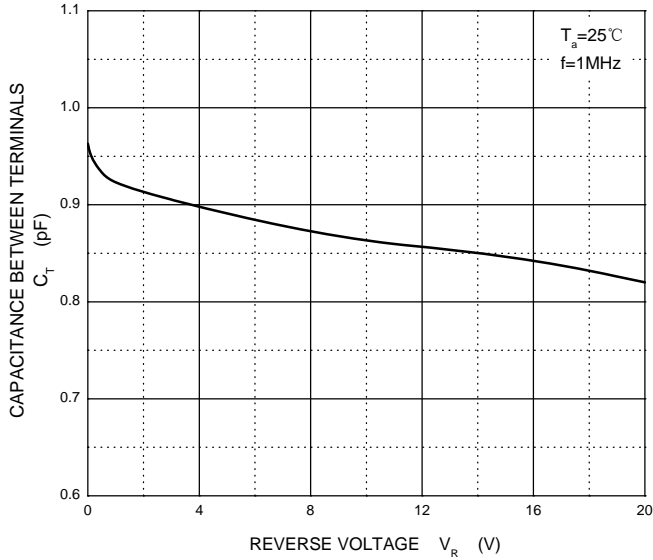
**Forward Characteristics**



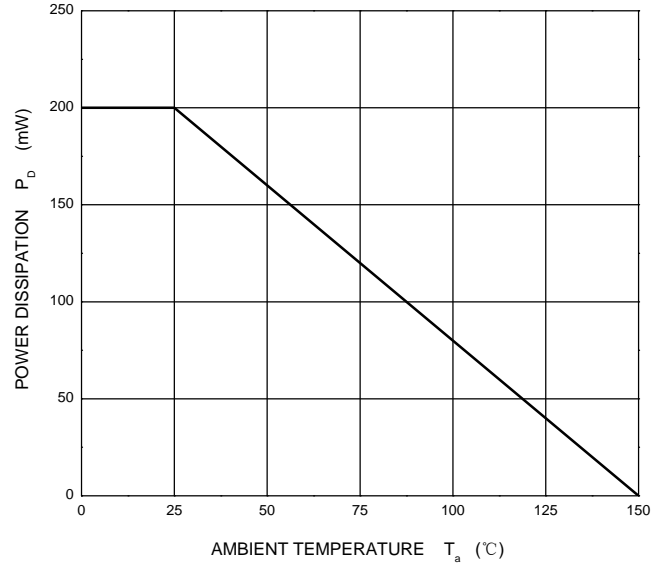
**Reverse Characteristics**



**Capacitance Characteristics**

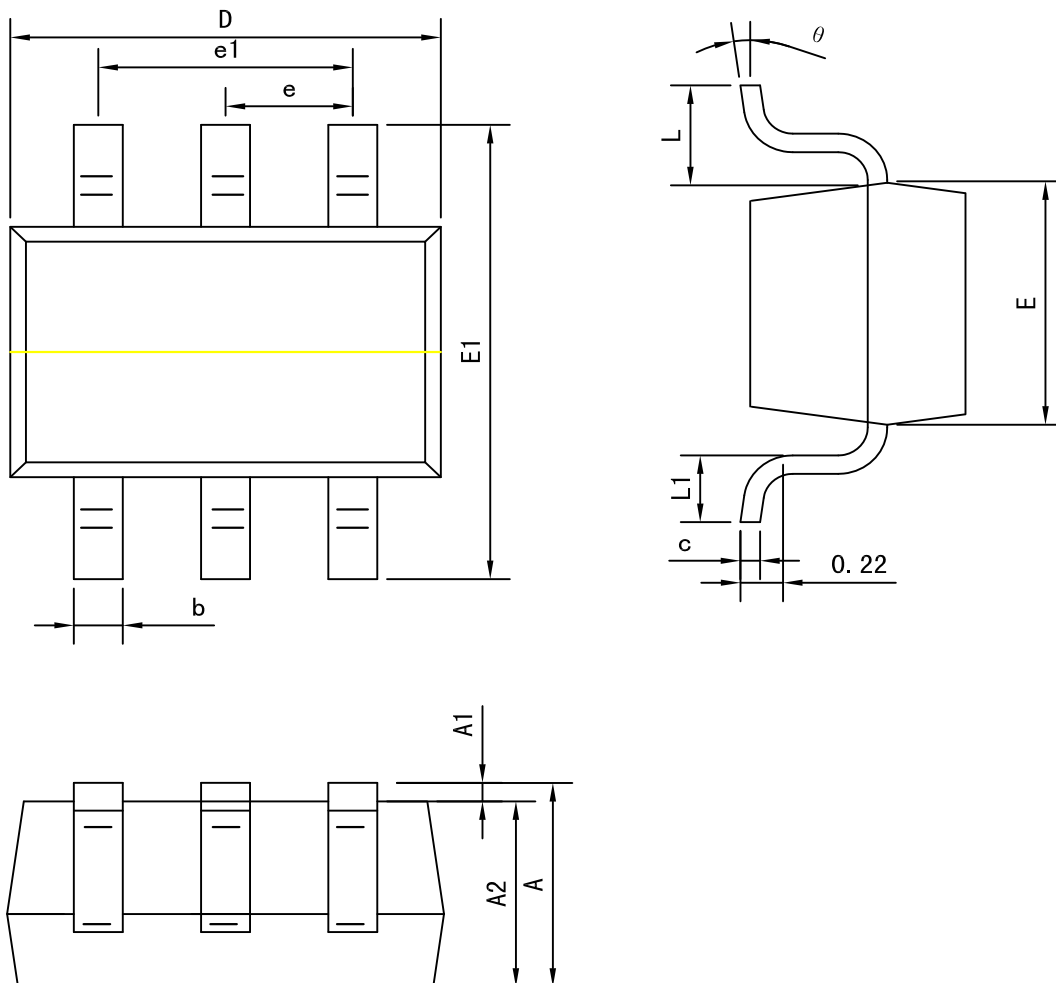


**Power Derating Curve**



## Package outline dimensions

### SOT-363



Symbol	Dimension in Millimeters	
	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°