

# BAV99DW

## BAV99DW SOT-363 Plastic-Encapsulate Switching Diode Array

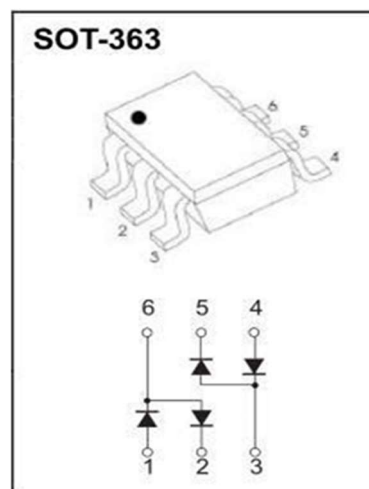
### General description

SOT-363 Plastic-Encapsulate Switching Diode Array

### FEATURES

- For General Purpose Switching Applications
- Ultra-Small Surface Mount Package
- Extremely Fast Switching Speed
- SOT-363 Plastic Package
- Epoxy UL: 94V-0

DEVICE MARKING: KJG



### Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
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 @ $t=8.3m$	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	200	mW
Junction-to-Ambient Thermal Resistance	$R_{\theta JA}$	625	°C/W
Junction and Storage Temperature	$T_J, T_{STG}$	-55~+150	°C

### Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

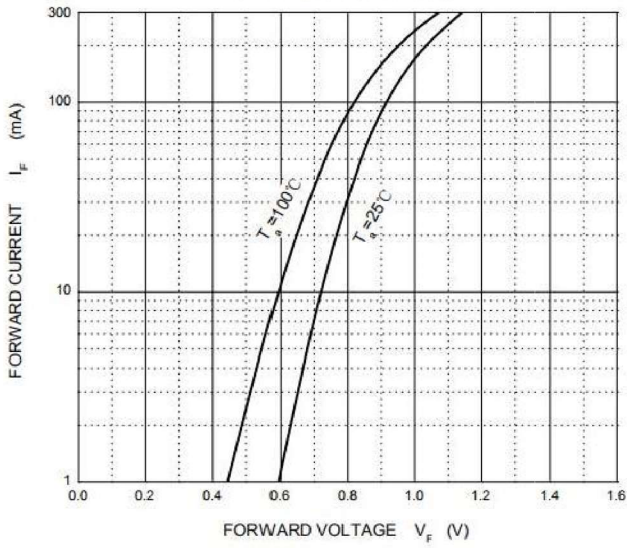
Parameters	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F=1mA$	--	--	0.715	V
		$I_F=10mA$	--	--	0.855	
		$I_F=50mA$	--	--	1	
		$I_F=150mA$	--	--	1.25	
Reverse Voltage	$V_R$	$I_R=2.5\mu A$	75	--	--	V
Reverse Current	$I_R$	$V_R=75V$	--	--	2.5	$\mu A$
		$V_R=20V$	--	--	25	nA
Total Capacitance	$C_T$	1MHz, $V_R=0V$	--	--	2	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10mA,$ $I_{tr}=0.1 \times I_R, R_L=100\Omega$	--	--	4	nS

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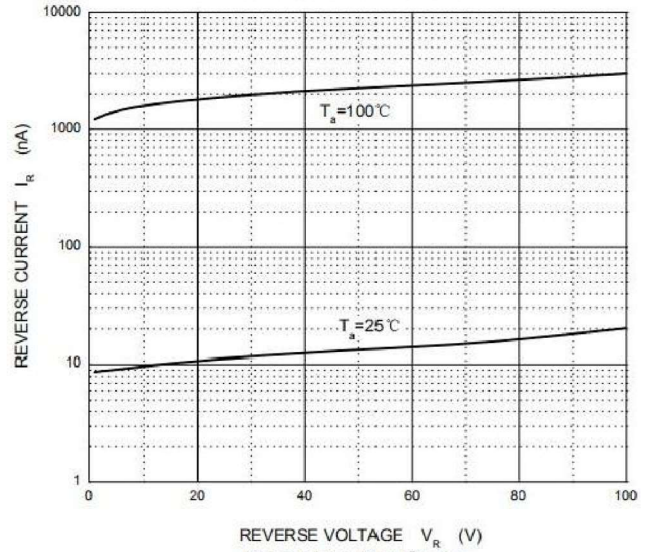


## Typical Characteristics

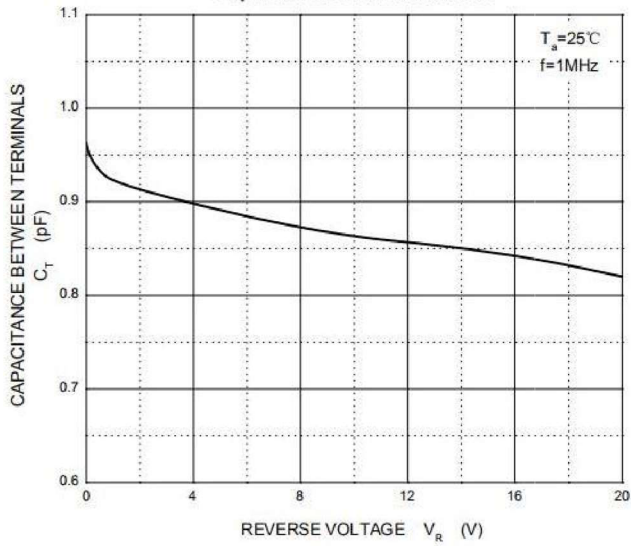
### Forward Characteristics



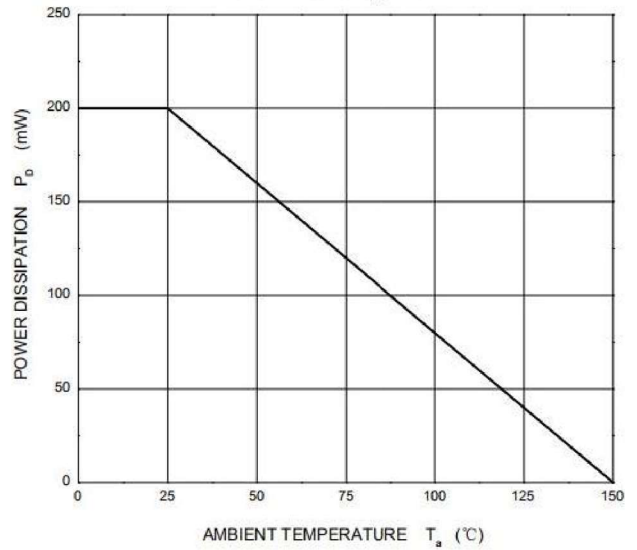
### Reverse Characteristics



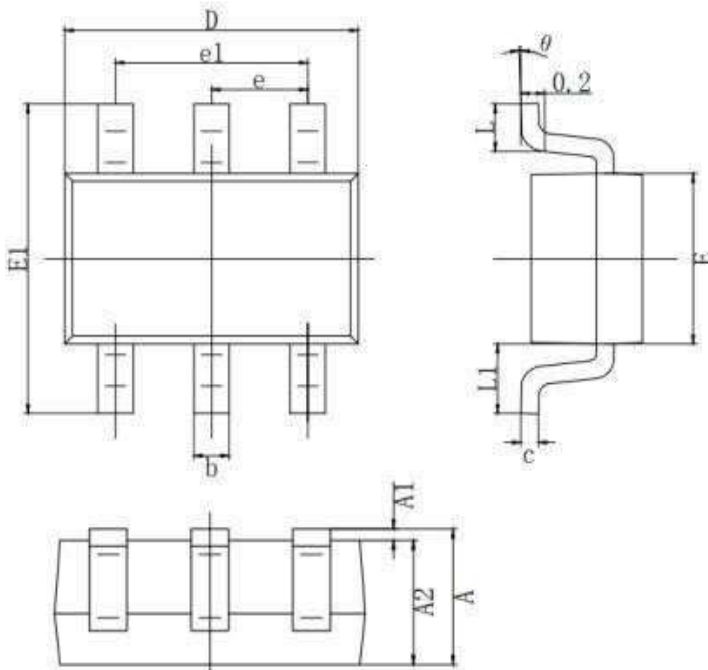
### Capacitance Characteristics



### Power Derating Curve

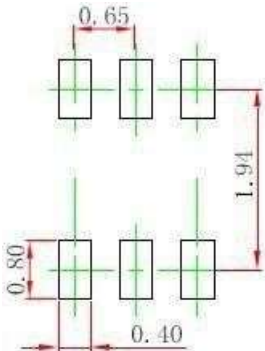


## SOT-363 PACKAGE OUTLINE Plastic surface mounted package



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
e	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	0.280	0.460
θ	0°	8°

Precautions: PCB Design (Recommended land dimensions for SOT-363 diode. Electrode patterns for PCBs)



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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