



### BAV99BDW HIGH-SPEED SWITCHING DIODE

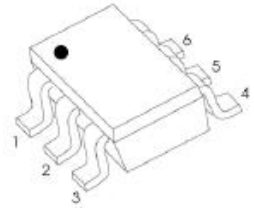
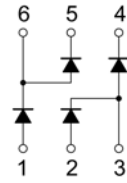
#### FEATURES

- Small Plastic Package
- Ultra High Speed Switching

#### APPLICATION

- For General Purpose Switching Application

#### MARKING: DN



SOT-363

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

Symbol	Parameter	Value	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	75	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
$I_O$	Average Rectified Output Current	215	mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
$P_D$	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

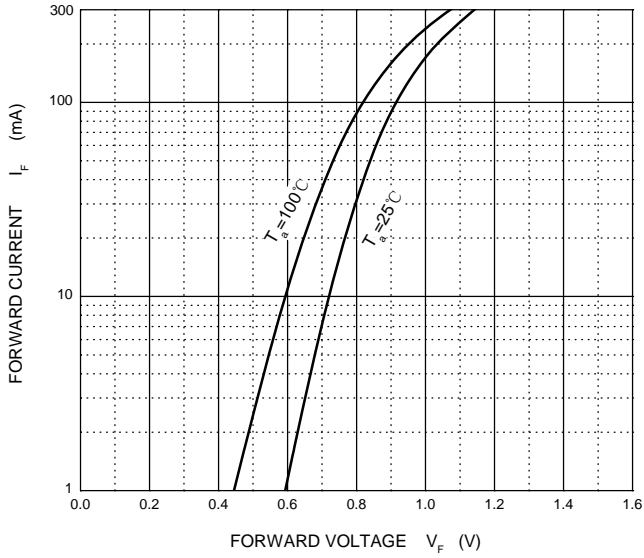
#### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	$I_R$	$V_R=75\text{V}$			2.5	$\mu\text{A}$
		$V_R=20\text{V}$			25	nA
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	$C_{tot}$	$V_R=0, f=1\text{MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			4	ns

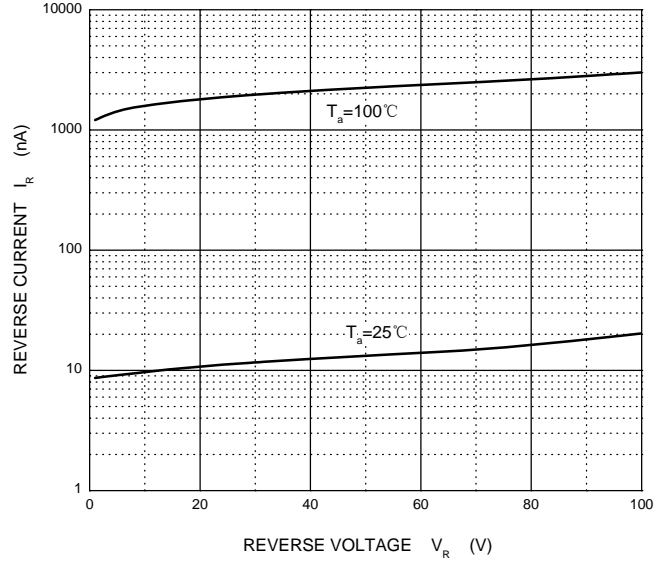


## Typical Characteristics

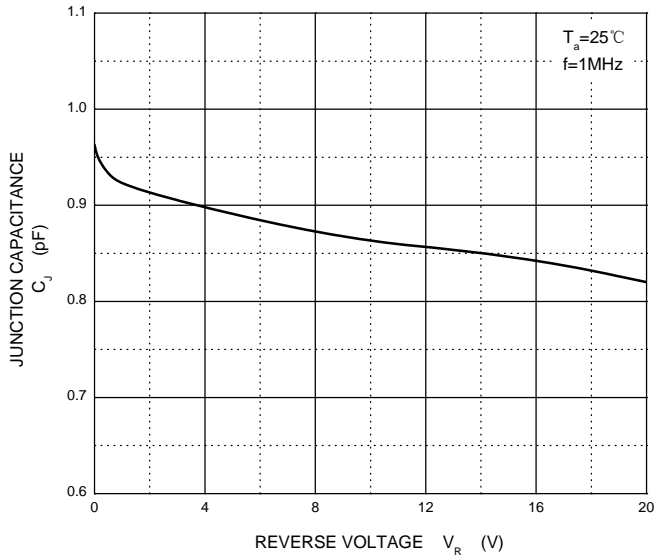
### Forward Characteristics



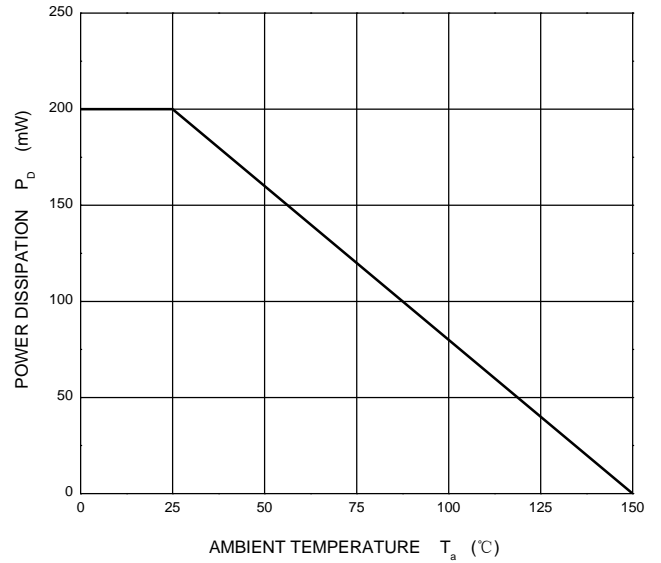
### Reverse Characteristics



### Capacitance Characteristics

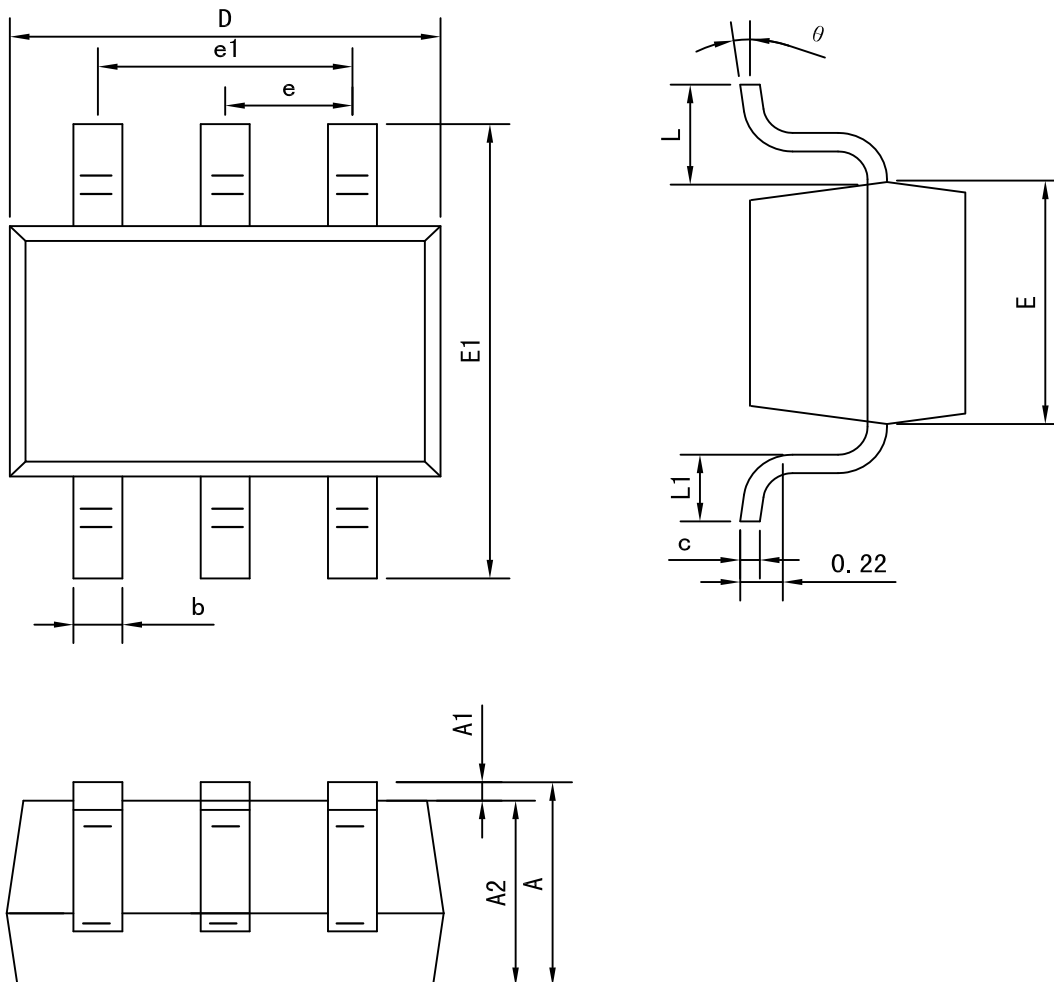


### Power Derating Curve





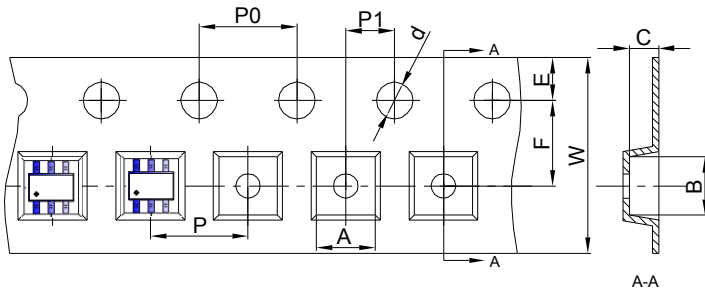
## SOT-363 Package outline dimensions



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°



### SOT-363 Embossed Carrier Tape



#### Packaging Description:

SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### SOT-363 Tape Leader and Trailer

