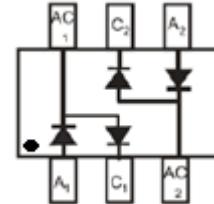




## Surface Mount Fast Switching Diodes

### FEATURES

- Fast switching speed
- Very low leakage current
- Ultra-small surface mount package



### APPLICATIONS

- For general purpose switching application.

SOT-363

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV199DW	K52	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

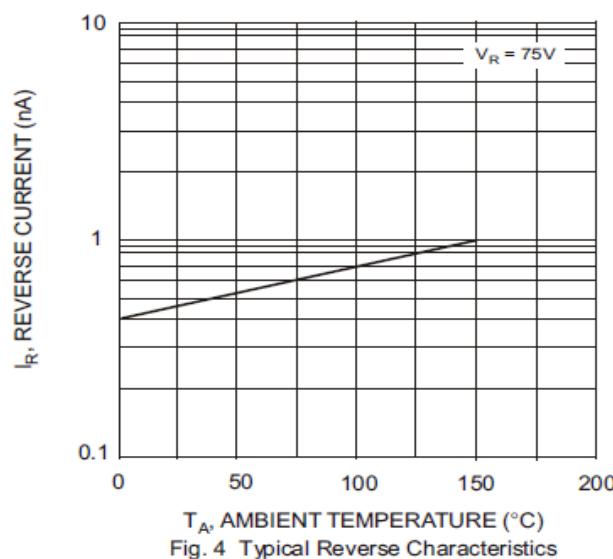
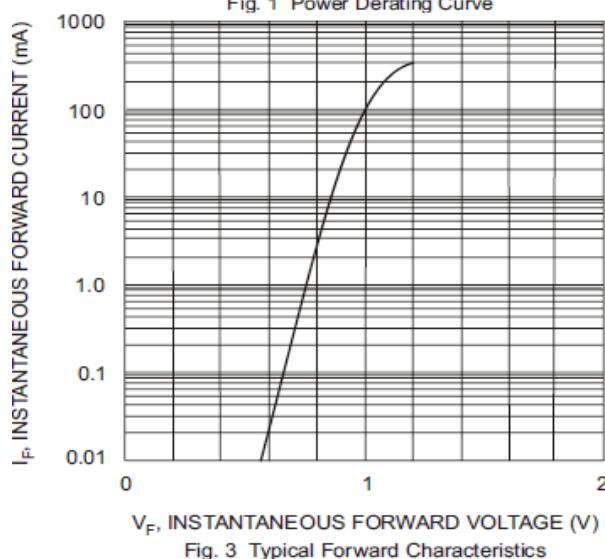
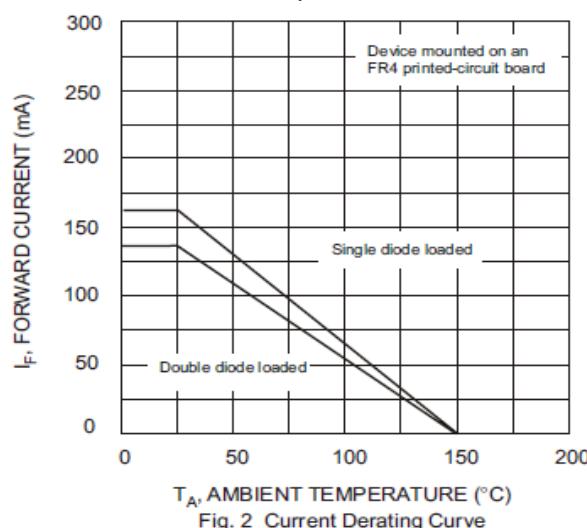
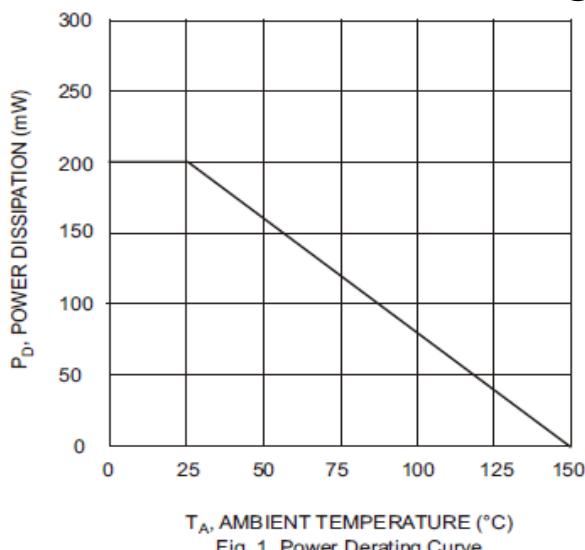
Symbol	Characteristic	Value	Unit
V <sub>RRM</sub>	Peak repetitive reverse voltage		
V <sub>RWM</sub>	Working peak reverse voltage	85	V
V <sub>R</sub>	DC reverse voltage		
V <sub>R(RMS)</sub>	RMS Reverse Voltage	60	V
I <sub>FRM</sub>	Repetitive peak forward current	500	mA
I <sub>FSM</sub>	Non-Repetitive peak forward surge current @t=1.0μS @t=1.0mS @t=1.0S	4.0 1.0 0.5	A
I <sub>FM</sub>	Forward Continuous Current Single diode Double diode	160 140	mA
P <sub>D</sub>	Power Dissipation	200	mW
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	625	°C/W
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-65 to +150	°C



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	85		V
Forward voltage	$V_F$	$I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		0.9 1.0 1.1 1.25	V
Leakage Current	$I_R$	$V_R=75\text{V}$ $V_R=75\text{V}, T_j=150^\circ\text{C}$		5.0 80	nA
Junction Capacitance	$C_J$	$V_R=0\text{V}, f=1.0\text{MHz}$		2.0	pF
Reverse Recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$		3.0	us

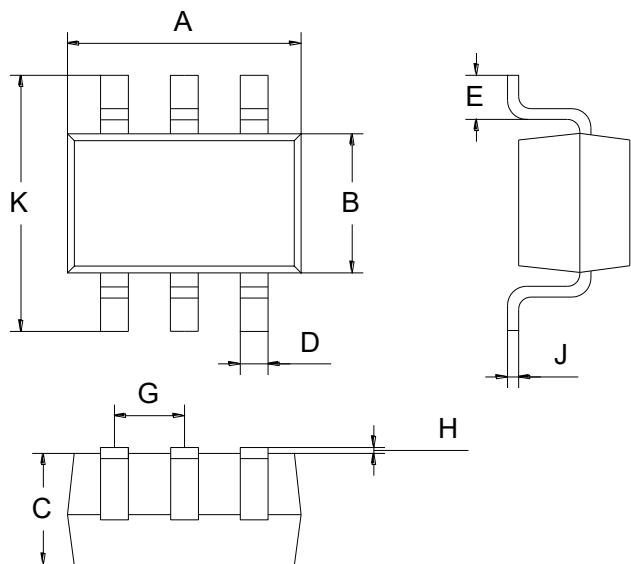
## TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified





## PACKAGE OUTLINE

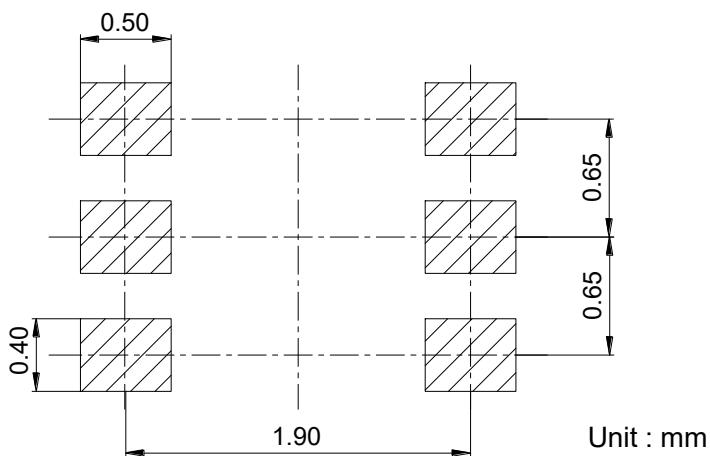
Plastic surface mounted package



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

All Dimensions in mm

## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
BAV199DW	SOT-363	3000 pcs / Tape & Reel