



Surface Mount Fast Switching Diodes

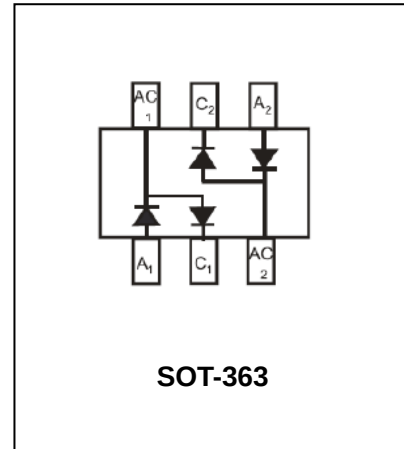
BAV199DW

FEATURES

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



Lead-free



APPLICATIONS

- For general purpose switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV199DW	K52	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
V_{RRM} V_{RWM} V_R	Peak repetitive reverse voltage Working peak reverse voltage DC reverse voltage	85	V
$V_{R(RMS)}$	RMS Reverse Voltage	60	V
I_{FRM}	Repetitive peak forward current	500	mA
I_{FSM}	Non-Repetitive peak forward surge current @t=1.0μS @t=1.0mS @t=1.0S	4.0 1.0 0.5	A
I_O	Average rectified output current	150	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

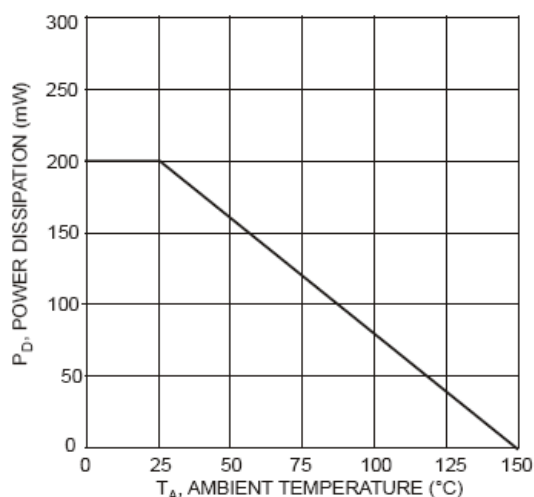


Fig. 1 Power Derating Curve, Total Package

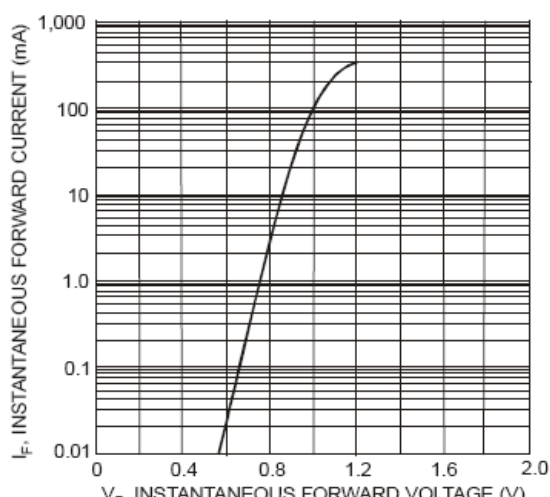


Fig. 2 Typical Forward Characteristics, Per Element

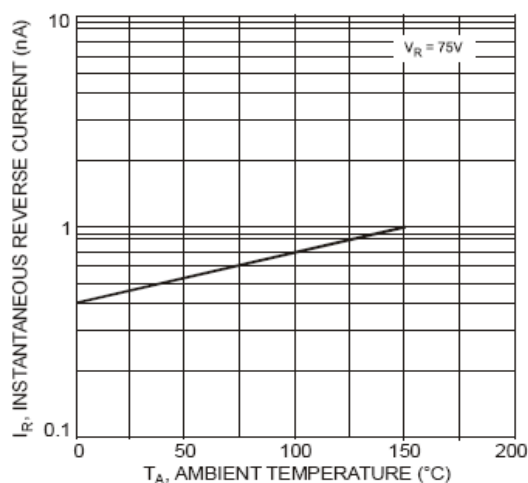


Fig. 3 Typical Reverse Characteristics, Per Element

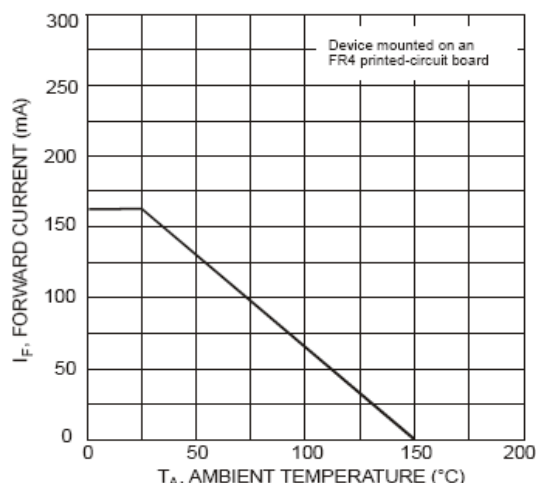


Fig. 4 Current Derating Curve, Per Element

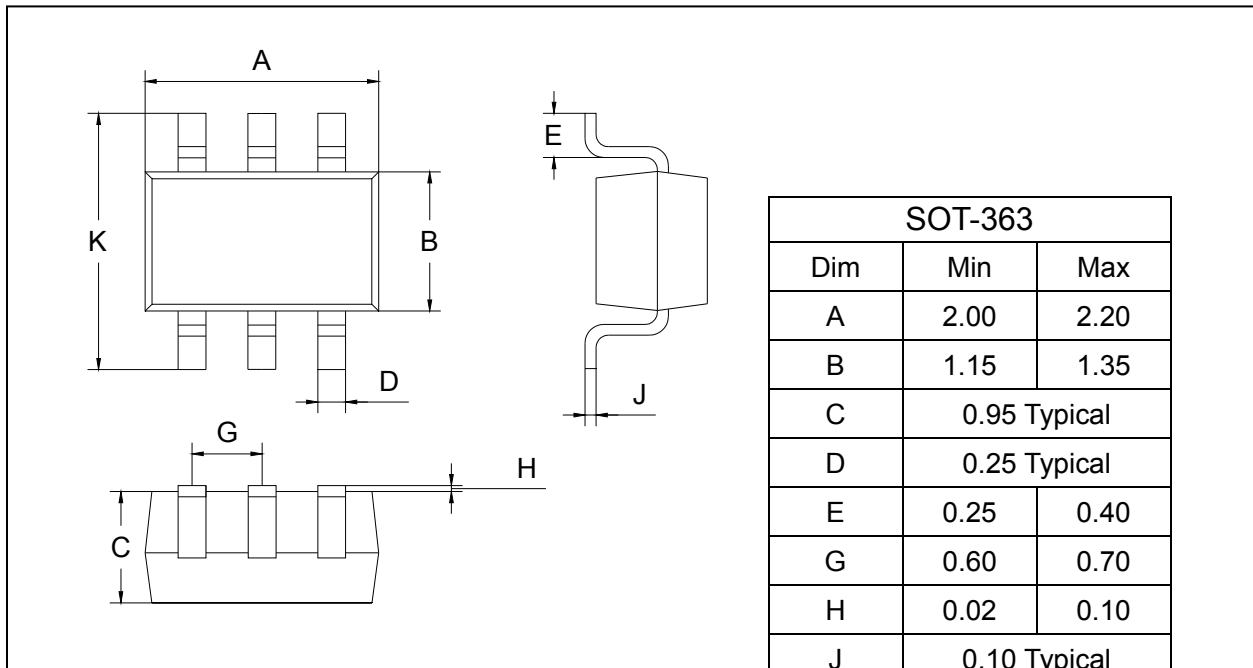
PACKAGE OUTLINE

Plastic surface mounted package

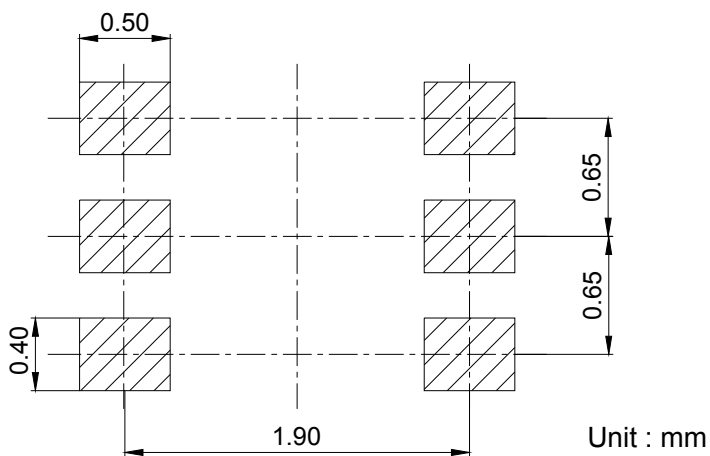
SOT-363

Surface Mount Fast Switching Diodes

BAV199DW



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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