

Surface Mount Fast Switching Diodes

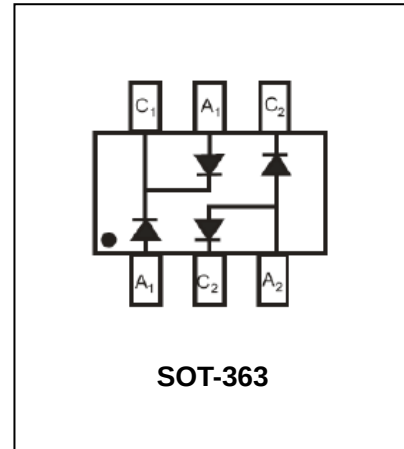
BAV756DW

FEATURES

- Fast switching speed.
- For general purpose switching application.
- Ultra-small surface mount package.
- High conductance.



Lead-free



APPLICATIONS

- For general purpose switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV756DW	KCA	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	75	V
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_F	Forward Continuous Current	300	V
I_O	Average Rectified Output Current	150	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=1.0us @t=1.0s	2.0 1.0	A
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

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=2.5\mu\text{A}$	75		V
Reverse voltage leakage current	I_R	$V_R=75\text{V}$		2.5	μA
		$V_R=75\text{V}, T_j=150^\circ\text{C}$		50	μA
		$V_R=25\text{V}, T_j=150^\circ\text{C}$		30	μA
		$V_R=20\text{V}$		25	nA
Forward voltage	V_F	$I_F=1.0\text{mA}$		0.715	V
		$I_F=10\text{mA}$		0.855	
		$I_F=50\text{mA}$		1.0	
		$I_F=150\text{mA}$		1.25	
Junction Capacitance	C_J	$V_R=0\text{V}, f=1.0\text{MHz}$		2.0	pF
Reverse Recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R,$ $R_L=100\Omega$		4.0	ns

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

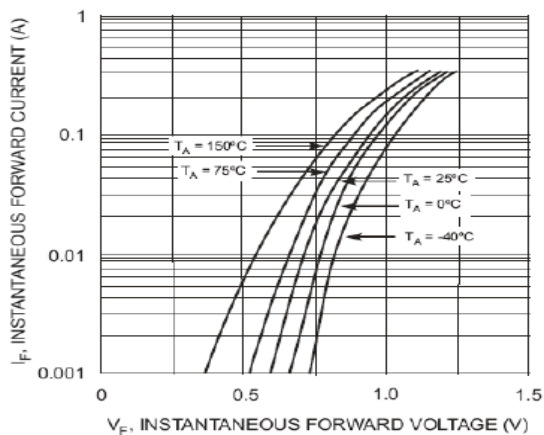


Fig. 1 Forward Characteristics

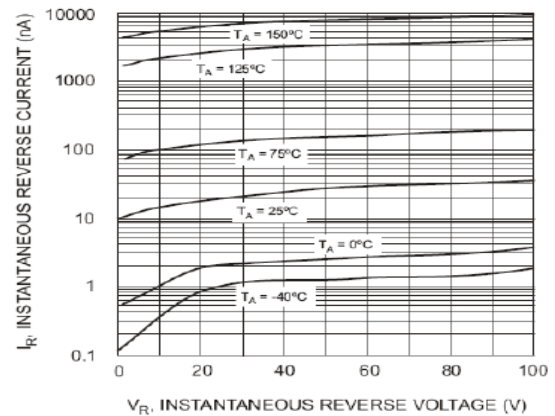


Fig. 2 Typical Reverse Characteristics

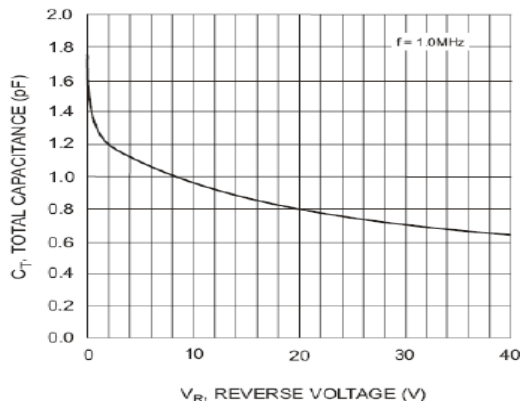


Fig. 3 Typical Capacitance vs. Reverse Voltage

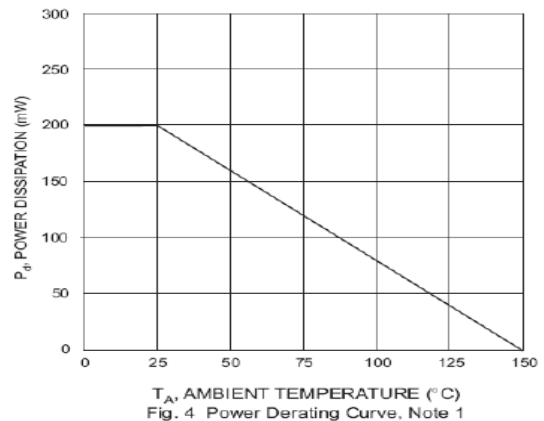


Fig. 4 Power Derating Curve, Note 1

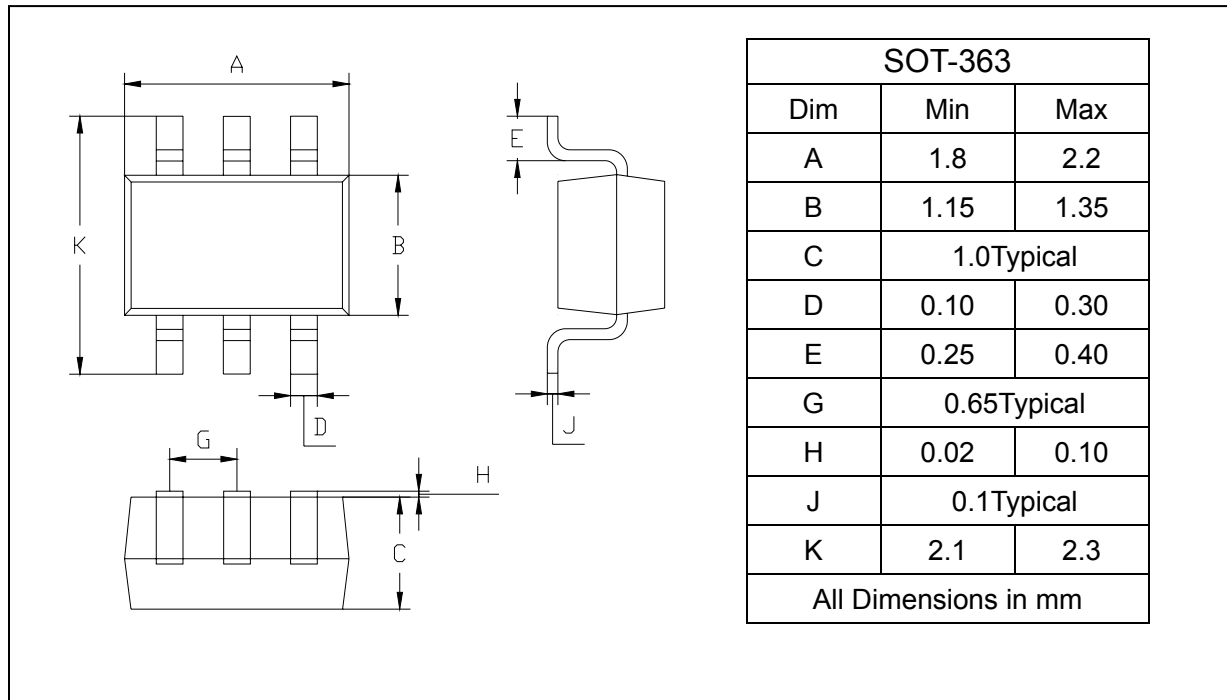
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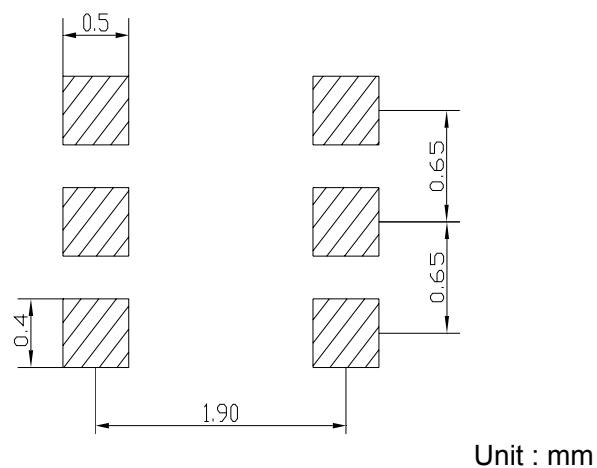
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAV756DW	SOT-363	3000/Tape&Reel