



Micro Commercial Components

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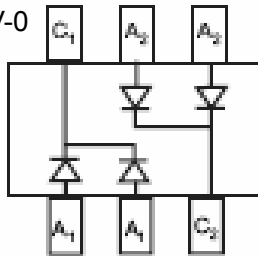
BAV70DW

Features

- Fast switching speed
- Ultra-Small surface mount package
- For general purpose switching applications
- High conductance

Mechanical Data

- Case Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- Marking Code: KJA



Maximum Ratings

Symbol	Rating	Rating	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	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_{FM}	Forward Continuous Current	300	mA
I_O	Average Rectified Output Current	150	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=1.0\mu s$ @ $t=1.0s$	2.0	A
		1.0	
P_D	Power Dissipation	200	mW
R_{JA}	Thermal Resistance Junction to Ambient Air	625	$^{\circ}C/W$
T_J	Junction Temperature	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$

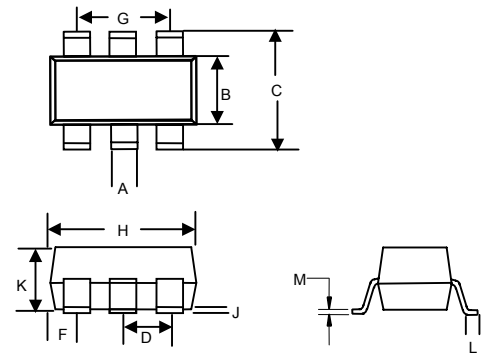
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)R}$	Reverse Breakdown Voltage ($I_R=2.5 \mu A$)	75	---	---	V
V_F	Forward Voltage ⁽¹⁾ $I_F=1.0mA$	---	---	0.715	V
	$I_F=10mA$	---	---	0.855	
	$I_F=50mA$	---	---	1.0	
	$I_F=150mA$	---	---	1.25	
I_R	Leakage Current ⁽¹⁾ ($V_R=75Vdc$) ($V_R=75Vdc, T_J=150^{\circ}C$) ($V_R=25Vdc, T_J=150^{\circ}C$) ($V_R=20Vdc$)	---	---	2.5	μA
		---	---	50	μA
		---	---	30	μA
		---	---	25	nA
C_j	Junction Capacitance ($V_R=0, f=1.0MHz$)	---	---	2.0	pF
t_{rr}	Reverse Recovery Time ($I_F=10mA, I_R=10mA, I_{rr}=0.1 \times I_R$ $R_L=100\Omega$)	---	---	4.0	ns

*⁽¹⁾ Short duration test pulse to minimize self-heating effect.

200mW Switching Diodes 75 Volts

SOT-363



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.004	.012	0.10	0.30	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026		0.65Nominal		
F	.012	.016	0.30	0.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.039	0.90	1.00	
L	.010	.016	0.25	0.40	
M	.004	.016	0.10	0.25	

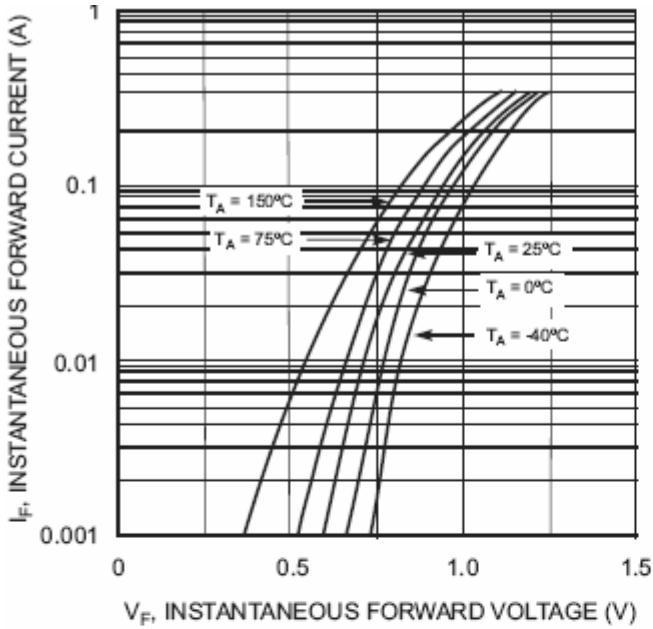


Fig. 1 Forward Characteristics

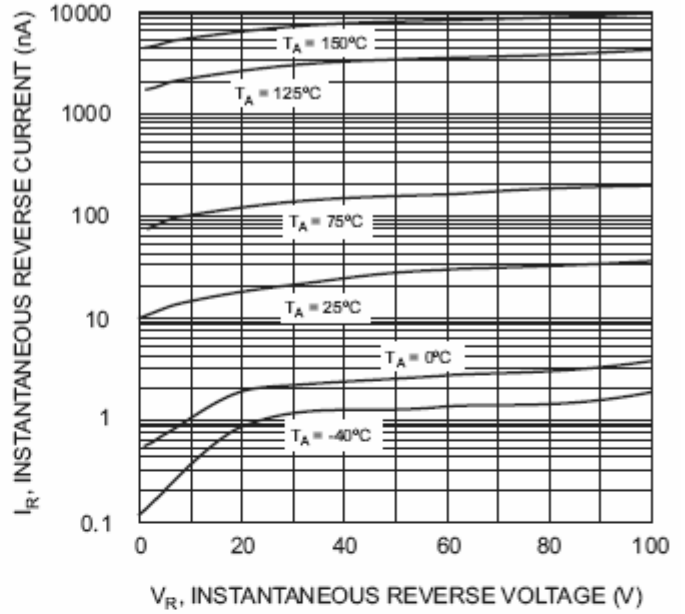


Fig. 2 Typical Reverse Characteristics

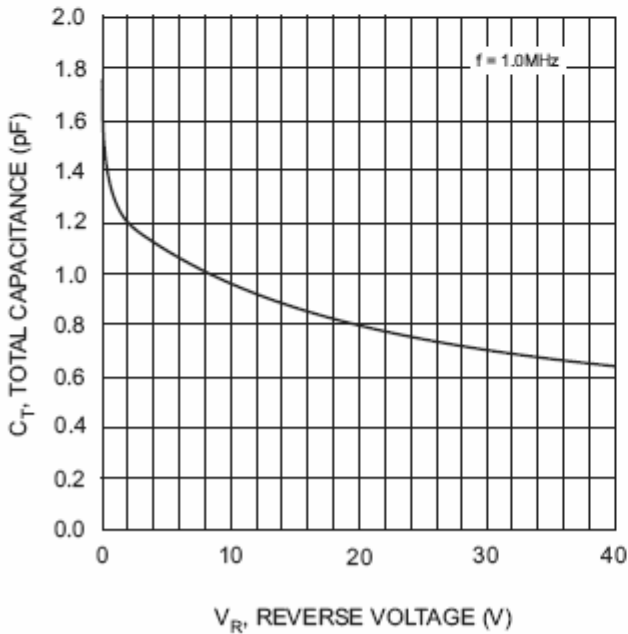


Fig. 3 Typical Capacitance vs. Reverse Voltage

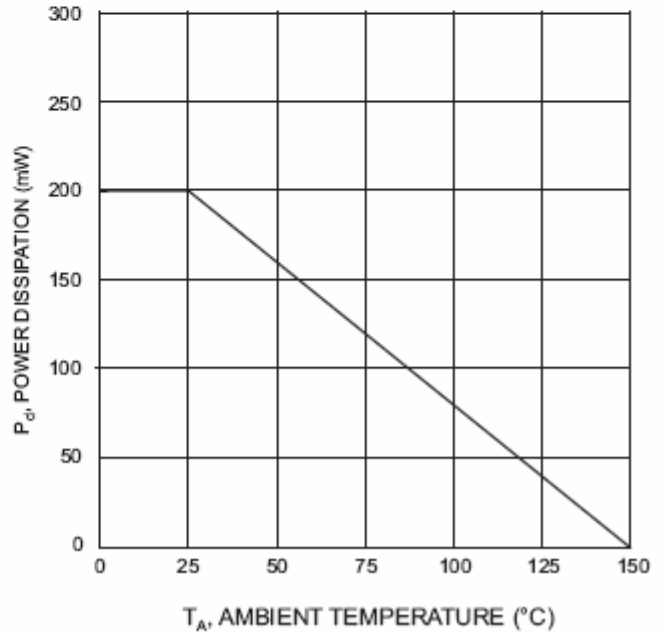


Fig. 4 Power Derating Curve



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