Features

- High Conductance
- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

200mW Switching Diodes 75 Volts

Maximum Ratings

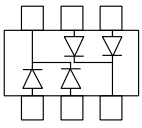
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance:625°C/W Junction to Ambient

MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
BAV70DW	KJA	75V	53V	75V

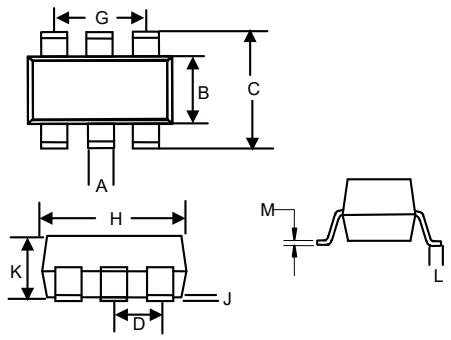
Non-Repetitive Peak Reverse Voltage	V_{RM}	100V	
Working Peak Reverse Voltage	V_{RWM}	75V	
Forward Continuous Current	I_{FM}	300mA	
Average Rectified Output Current	I_o	150mA	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.0A 1.0A	@ t=1.0μs @ t=1.0s
Power Dissipation	P_D	200mW	T_A=25°C

Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure

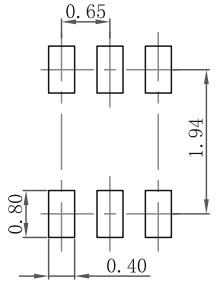


SOT-363



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D	0.026		0.65 Nominal		
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	-----	0.004	-----	0.10	
K	0.031	0.043	0.80	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Breakdown Voltage	V_{BR}	75V	I_R=2.5μA
Maximum Forward Voltage (2)	V_F	0.715V 0.855V 1.000V 1.250V	I_F=1.0mA I_F=10.0mA I_F=50.0mA I_F=150.0mA
Maximum Peak Reverse voltage (2)	I_R	2.5μA 50μA 30μA 25nA	V_R=75V V_R=75V, T_j=150°C V_R=25V, T_j=150°C V_R=20V
Maximum Junction Capacitance	C_J	2.0pF	V_R=0.0V,f=1.0MHz
Maximum Reverse Recovery Time	t_{rr}	4.0ns	I_F=10mA, I_R=10mA I_{rr}=0.1*IR, R_L=100Ω

Note:2. Short duration test pulse to minimize self-heating effect.

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

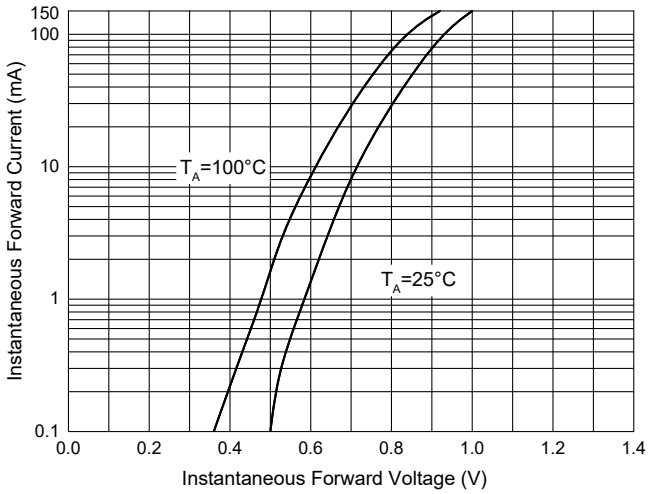


Fig. 2 - Typical Reverse Leakage Characteristics

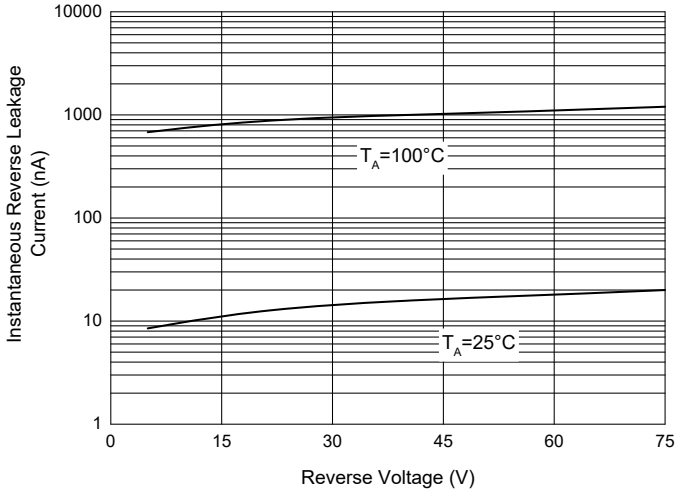
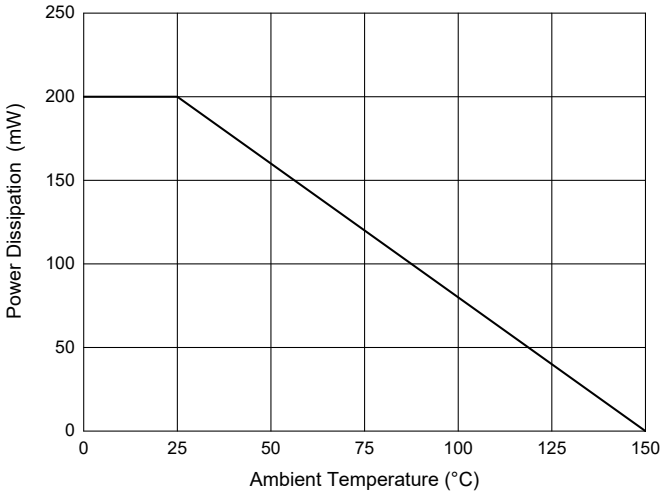


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel
Part Number-13P	Tape&Reel: 10Kpcs/Reel

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