

Features

- Fast Switching Speed
- High Conductance
- 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)

Maximum Ratings

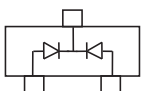
- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 357°C/W Junction to Ambient

MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage V_{RRM}	DC Blocking Voltage V_R
BAV70M	A4	75V	75V

Non-Repetitive Peak Reverse Voltage	V_{RM}	100V	
Working Peak Reverse Voltage	V_{RWM}	75V	
Average Rectified Output Current	I_o	200mA	
Peak Forward Surge Current	I_{FSM}	2.0A 1.0A	@1.0µs @1.0s
Repetitive Peak Forward Current	I_{FRM}	450mA	
Power Dissipation	P_D	150mW	

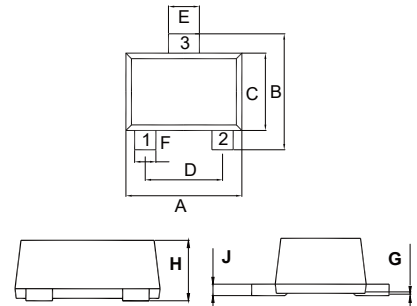
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



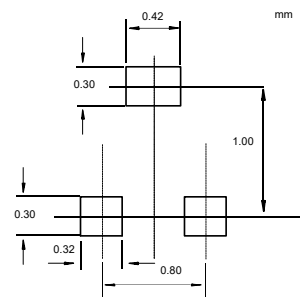
**150mW
Switching Diodes**

SOT-723



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.043	0.051	1.10	1.30	
B	0.043	0.051	1.10	1.30	
C	0.028	0.035	0.70	0.90	
D	0.031TYP.		0.80TYP.		
E	0.009	0.017	0.22	0.42	
F	0.005	0.013	0.12	0.32	
G	0.000	0.002	0.00	0.05	
H	0.017	0.021	0.43	0.54	
J	0.003	0.006	0.08	0.15	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Forward Voltage	V_F	0.715V 0.855V 1.000V 1.250V	$I_F=1.0\text{mA}$ $I_F=10.0\text{mA}$ $I_F=50.0\text{mA}$ $I_F=150.0\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	2.5 μA 30 μA 50 μA 25nA	$V_R=75\text{V}$ $V_R=25\text{V } T_j=150^\circ\text{C}$ $V_R=75\text{V } T_j=150^\circ\text{C}$ $V_R=25\text{V}$
Diode Capacitance	C_D	2.0pF	$V_R=0.0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	4.0ns	$I_F=10\text{mA}, I_R=10\text{mA}$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$ $V_R=5.0\text{V}$

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

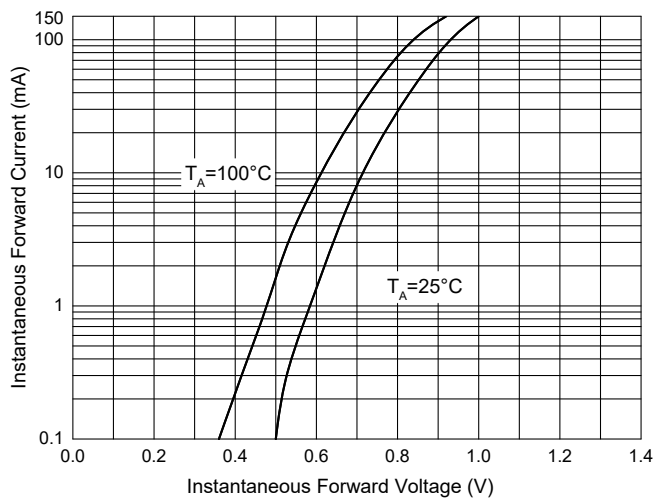


Fig. 2 - Typical Reverse Leakage Characteristics

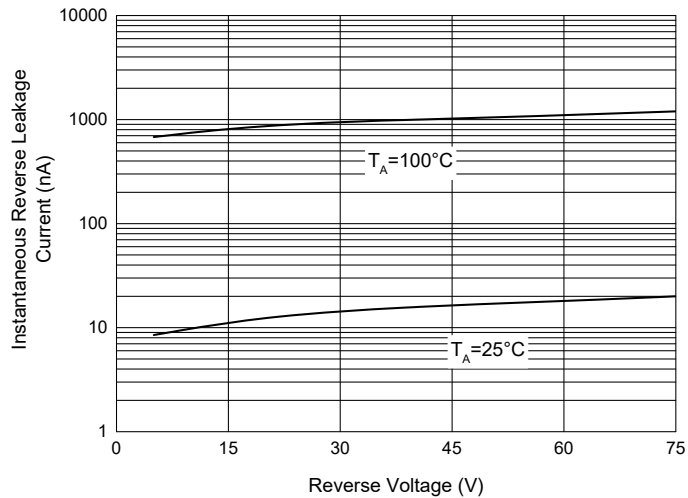


Fig. 3 - Power Derating Curve

