

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Ultra-Small Surface Mount Package
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance(Note2); 500°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	RMS Reverse Voltage $V_R(RMS)$	DC Blocking Voltage V_R
BAV23-TP	250V	177V	250V

Electrical Characteristics @ 25°C Unless Otherwise Specified

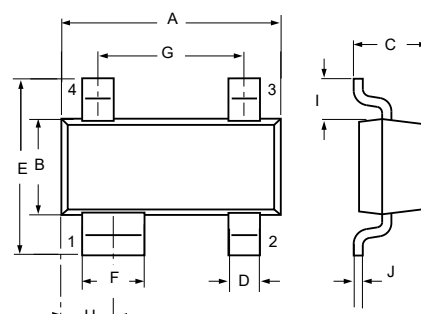
Forward Continuous Current	I_F	225mA	
Repetitive Peak Forward Current	I_{FRM}	625mA	
Forward Surge Current	I_{FSM}	3A	$t=1ms$
Power Dissipation	P_D	250mW	$T_A = 25^\circ C$
Max Forward Voltage	V_F	1000mV 1250mV	$I_F=100mA$; $I_F=200mA$;
Max Reverse Current	I_R	0.1μA 100μA	$V_R=400V$ $V_R=400V, T_j=150^\circ C$
Min Reverse Breakdown Voltage	$V_{(BR)}$	200V	$I_R = 100\mu A$
Max Junction Capacitance	C_J	5pF	Measured at 1.0MHz, $V_R=1.0V$
Max Reverse Recovery Time	t_{rr}	50ns	$I_F=I_R=10mA, I_{rr}=0.1I_R$, $R_L=100\Omega$

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

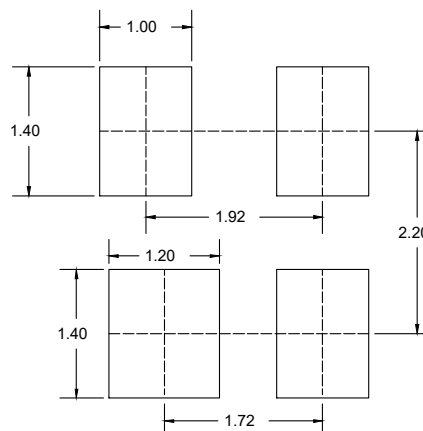
Note: 2. Part mounted on FR-4 board with recommended pad layout.

250mWatt Switching Diode

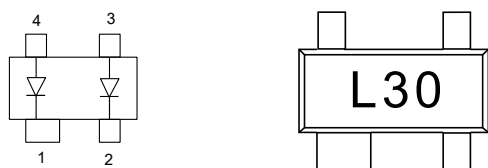
SOT-143



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.047	0.055	1.20	1.39	
C	0.031	0.048	0.80	1.22	
D	0.011	0.020	0.30	0.51	
E	0.082	0.104	2.10	2.64	
F	0.029	0.037	0.76	0.94	
G	0.070	0.080	1.78	2.03	
H	0.028	0.033	0.72	0.83	
I	0.015	0.024	0.40	0.60	
J	0.003	0.008	0.08	0.20	



Internal Structure and Marking Code



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

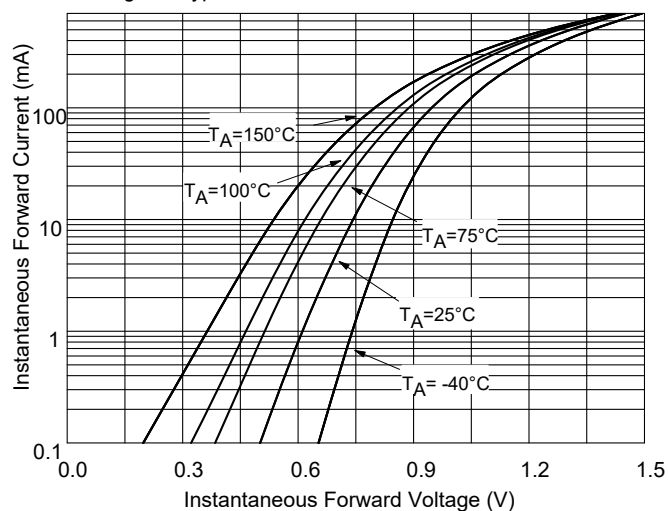


Fig. 2 - Typical Reverse Leakage Characteristics

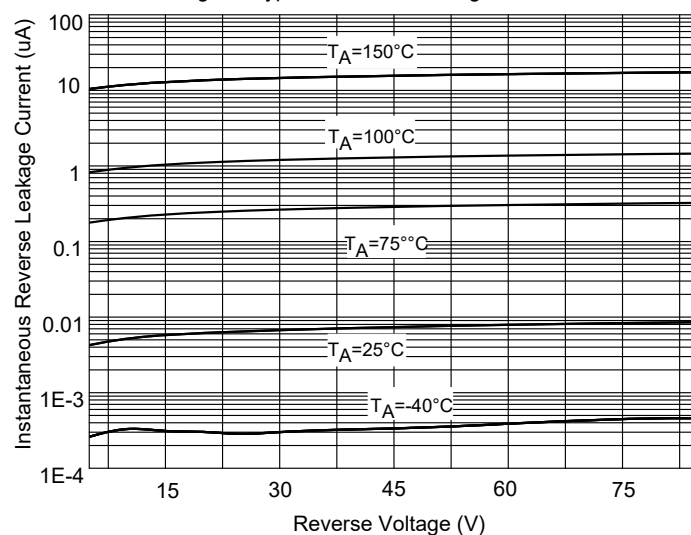


Fig. 3 - Capacitance Characteristics

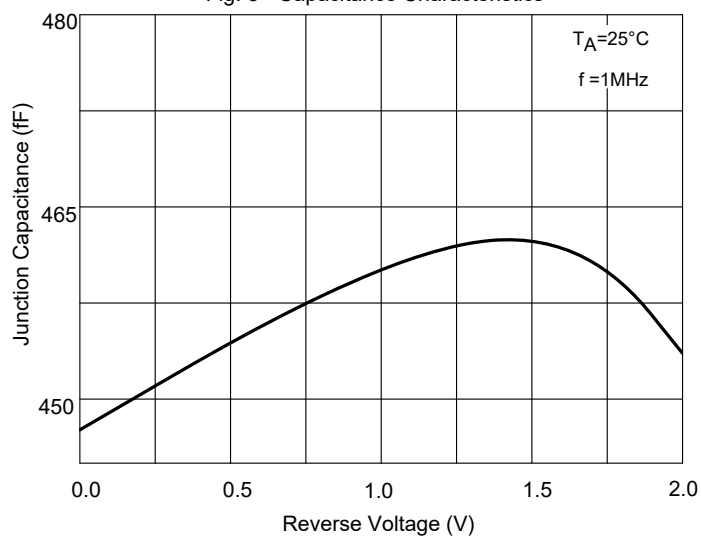
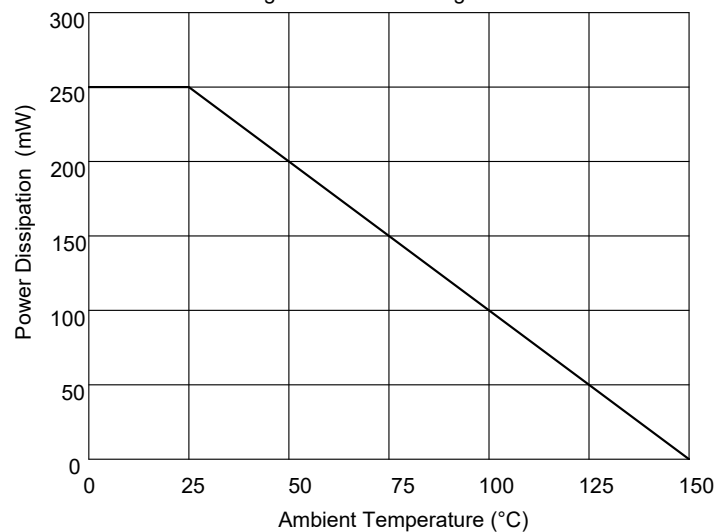


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
BAV23-TP	Tape&Reel;3Kpcs/Reel

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