

Features

- Low Leakage Current
- Fast Switching Speed
- High Reverse Breakdown Voltage
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- 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: 833°C/W Junction to Ambient

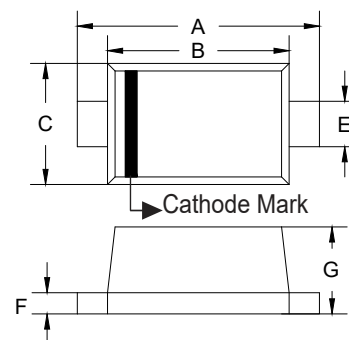
MCC Part Number	Device Marking
BAV3004X	4P

Parameter	Symbol	Value
DC Reverse Voltage	V_R	300V
Peak Repetitive Reverse Voltage	V_{RRM}	350V
RMS Reverse Voltage	$V_{R(RMS)}$	210V
Forward Continuous Current	I_{FM}	225mA
Repetitive Peak Forward Current	I_{FRM}	625mA
Peak Forward Surge Current (t=1s)	I_{FSM}	1A
(t=1μs)		4A
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.

150mW Low Leakage Diodes

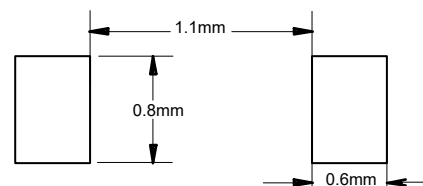
SOD-523



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.043	0.051	1.10	1.30	
C	0.030	0.033	0.75	0.85	
E	0.010	0.014	0.25	0.35	
F	0.003	0.008	0.08	0.20	
G	0.020	0.026	0.50	0.65	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=150\mu A$	350			V
Forward Voltage	V_F	$I_F=20mA$		0.78	0.87	V
		$I_F=100mA$		0.93	1	V
		$I_F=200mA$		1.03	1.25	V
Reverse Current	I_R	$V_R=240V$		30	100	nA
		$V_R=240V, T_J=150^\circ C$		35	100	μA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		1	5.1	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			50	ns

* Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

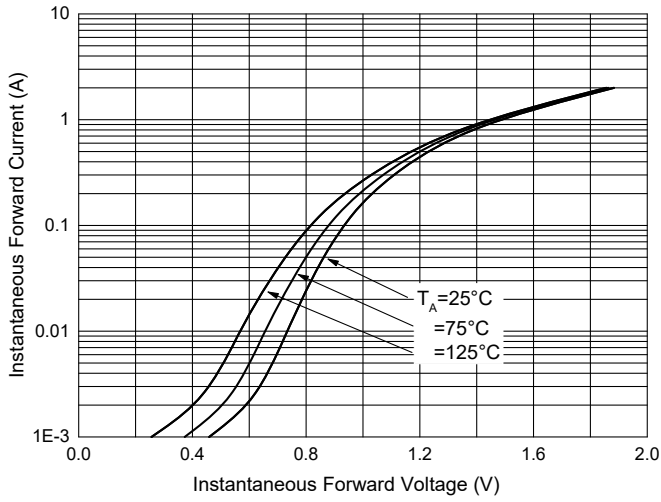


Fig. 2 - Typical Reverse Leakage Characteristics

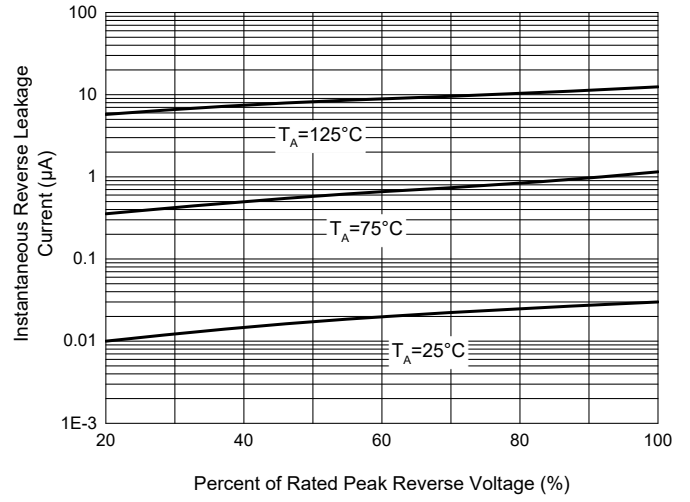
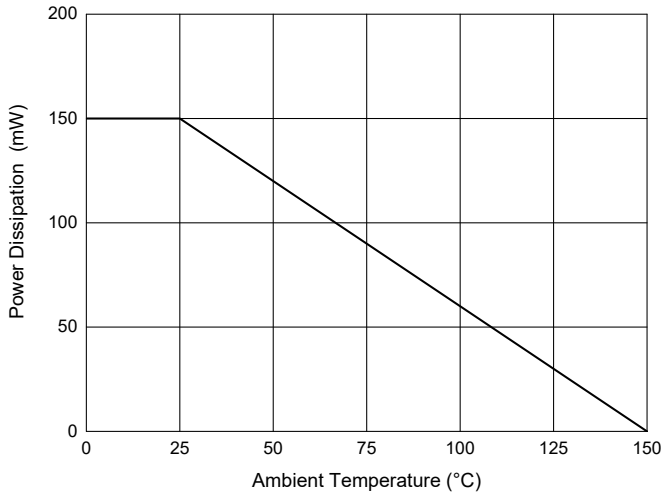


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

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