Features

- Low Turn-on Voltage.
- Fast Switching
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

150mW, 40Volt Schottky Barrier Diode

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

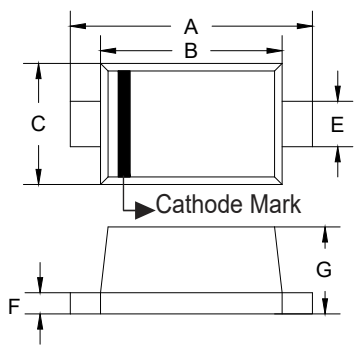
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAS40X	43	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I_F	200mA	
Peak Forward Surge Current	I_{FSM}	600mA	
Power Dissipation	P_d	150mW	
Maximum Forward Voltage	V_F	380mV 1000mV	t_p<300μs,I_F=1.0mA t_p<300μs,I_F=40mA
DC Reverse Current At Rated DC Blocking Voltage	I_R	20nA(Typ) 200nA(Max)	V_R = 30V
Reverse Breakdown Voltage	V_{BR}	40V(Min)	I_R=100μA
Typical Junction Capacitance	C_j	4.0pF	Measured at 1.0MHz, V_R=0.0V
Reverse Recovery Time	Trr	5.0ns(Max)	I_F=I_R=10mA to I_R=1.0mA,R_L=100Ω

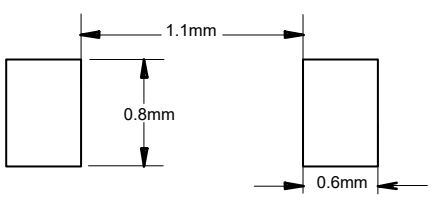
Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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



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Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

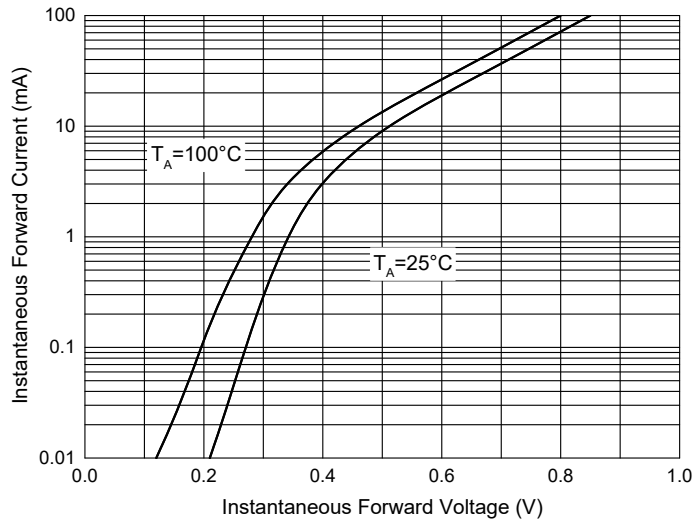


Fig. 2 - Typical Reverse Leakage Characteristics

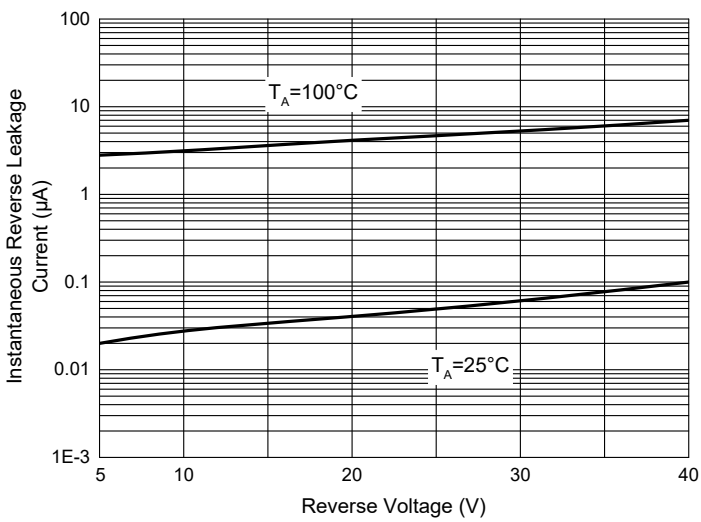
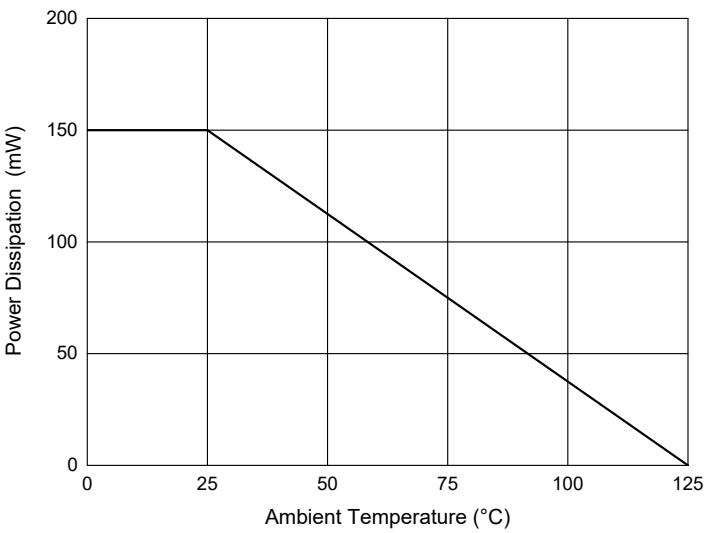


Fig. 3 - Power Derating Curve



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Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel
Part Number-T3P	Tape&Reel: 3Kpcs/Reel

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