

## 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)

## 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

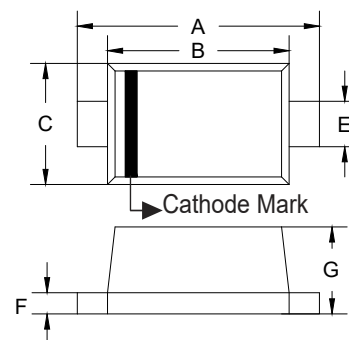
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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	$t_p < 300\mu s, I_F = 1.0mA$ $t_p < 300\mu s, I_F = 40mA$
DC Reverse Current At Rated DC Blocking Voltage	$I_R$	20nA(Typ) 200nA(Max)	$V_R = 30V$
Reverse Breakdown Voltage	$V_{BR}$	40V(Min)	$I_R = 100\mu A$
Typical Junction Capacitance	$C_j$	4.0pF	Measured at 1.0MHz, $V_R = 0.0V$
Reverse Recovery Time	$T_{rr}$	5.0ns(Max)	$I_F = I_R = 10mA$ to $I_R = 1.0mA, R_L = 100\Omega$

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

# 150mW, 40Volt Schottky Barrier Diode

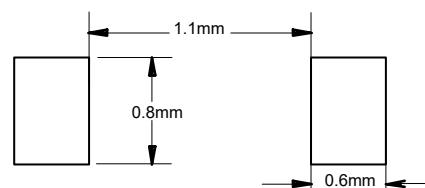
## SOD-523



### 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



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

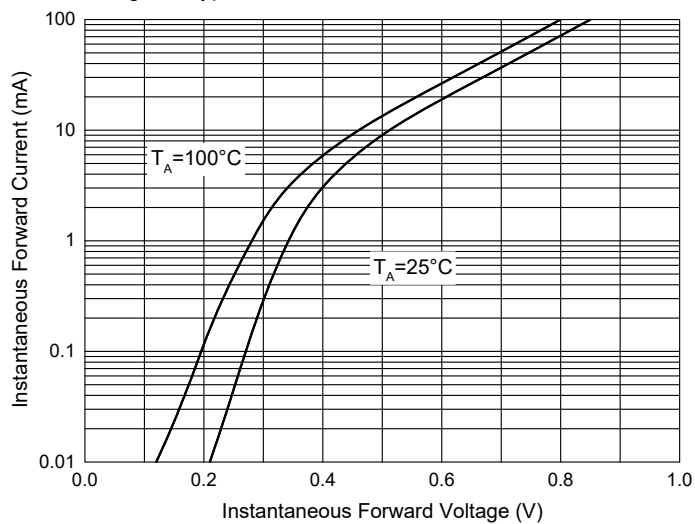


Fig. 2 - Typical Reverse Leakage Characteristics

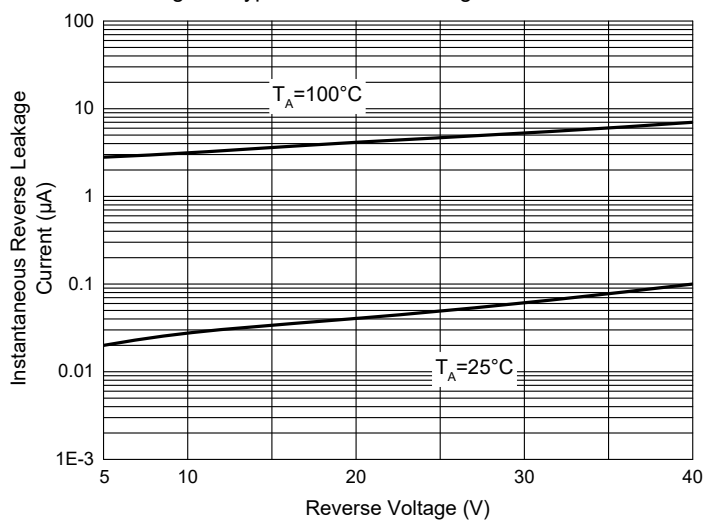
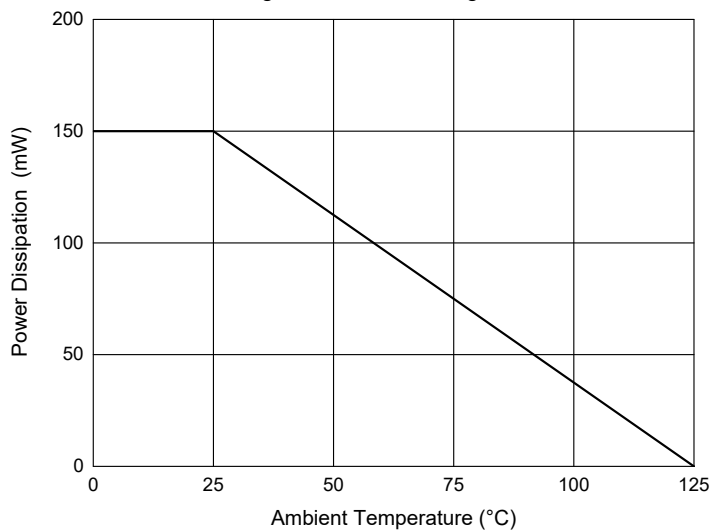


Fig. 3 - Power Derating Curve



## Ordering Information

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

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