

**Features**

- Fast Switching Speed. Low Turn-on Voltage
- Surface Mount Package Ideally Suited For Automatic Insertion
- PN Junction Guard Ring For Transient and ESD Protection
- 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: -65°C to +150°C
- Thermal Resistance(Note 2): 285°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAS40WX	43	40V	28V	40V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

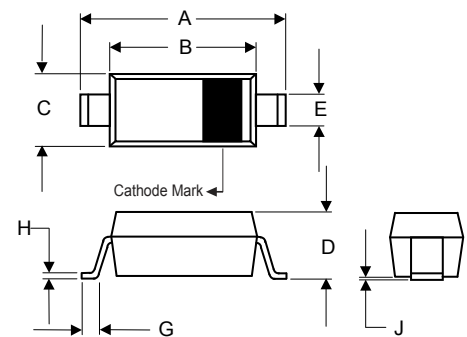
Forward Continuous Current(Note2)	$I_{F(AV)}$	200mA	
Peak Forward Surge Current	$I_{FSM}$	600mA	$t=8.3ms$
Power Dissipation(Note 2)	$P_d$	350mW	
Maximum Instantaneous Forward Voltage	$V_F$	0.38V 1.00V	$t_p < 300\mu s$ $I_F = 1.0mA$ $t_p < 300\mu s$ $I_F = 40mA$
DC Reverse Current At Rated DC Blocking Voltage	$I_R$	20nA(Typ) 200nA(Max)	$t_p < 300\mu s$ $V_R = 30V$
Reverse Recovery Time	$T_{rr}$	5ns(Max)	$I_F = I_R = 10mA$ $I_R = 1.0mA$ , $R_L = 100\Omega$
Junction Capacitance	$C_J$	4pF(Typ) 5pF(Max)	Measured at 1.0MHz, $V_R = 0.0V$

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

Notes: 2. Valid provided that terminals are kept at ambient temperature.

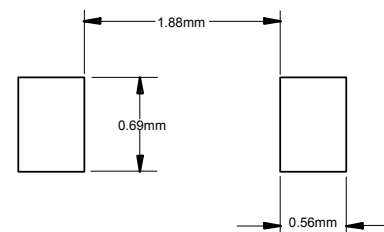
**350mW, 40 Volt Schottky Barrier Diode**

**SOD-323**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	----	0.006	----	0.15	

**Suggested Solder Pad Layout**



**Curve Characteristics**

Fig. 1 - Typical Instantaneous Forward Characteristics

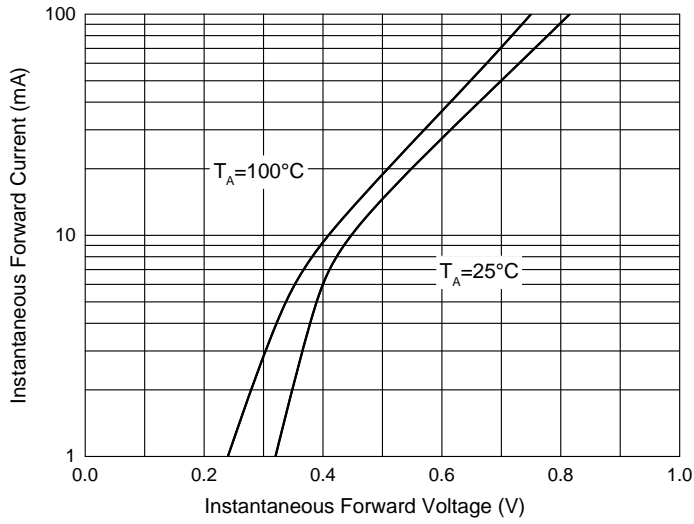


Fig. 2 - Typical Reverse Leakage Characteristics

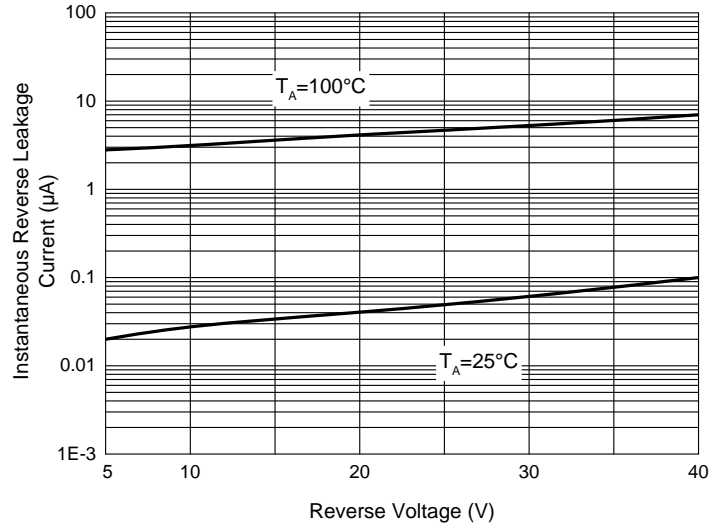
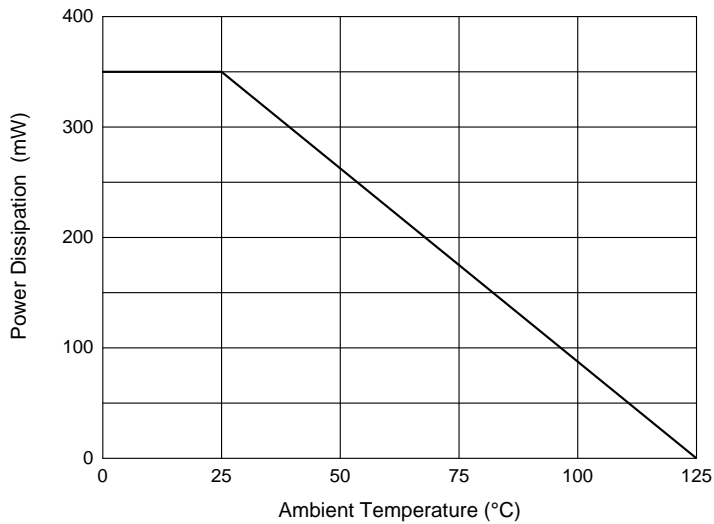


Fig. 3 - Power Derating Curve



## Ordering Information

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

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