

## Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- For Surface Mount Application
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Frequency And Low Voltage Rectifier

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 500°C/W Junction to Ambient(Note2)

MCC Part Number	Repetitive Peak Reverse Voltage $V_{RRM}$	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage $V_R$
BAS40W	40V	28V	40V

## Maximum Electrical Characteristics @ 25°C Unless Otherwise Specified

Forward Current	$I_F$	200mA	
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	2A	@ t=8.3ms
Power Dissipation	$P_D$	200mW	$T_A=25^\circ\text{C}$

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

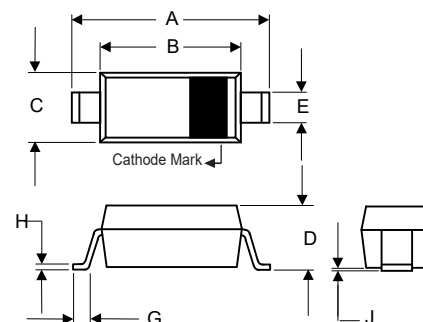
2. Part mounted on FR-4 board with recommended pad layout.

## Internal Structure and Marking Code



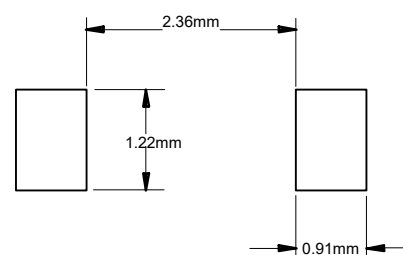
# 200 mA Schottky Rectifier 40 Volts

## SOD-123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

## Suggested Solder Pad Layout



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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{BR}$	$I_R=10\mu A$	40			V
Forward Voltage	$V_{F1}$	$I_F=1mA$			0.39	V
	$V_{F2}$	$I_F=40mA$			1.00	V
Reverse Current	$I_R$	$V_R=30V$			0.2	$\mu A$
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$			5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			5	ns

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

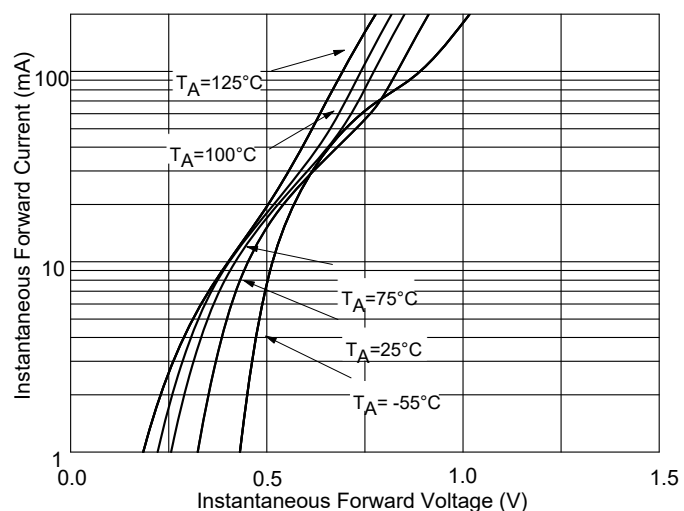


Fig. 2 - Typical Reverse Leakage Characteristics

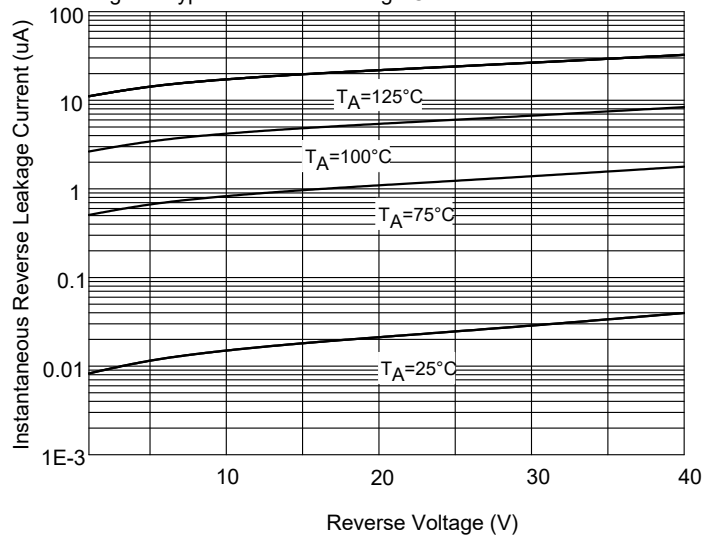


Fig. 3 - Capacitance Characteristics

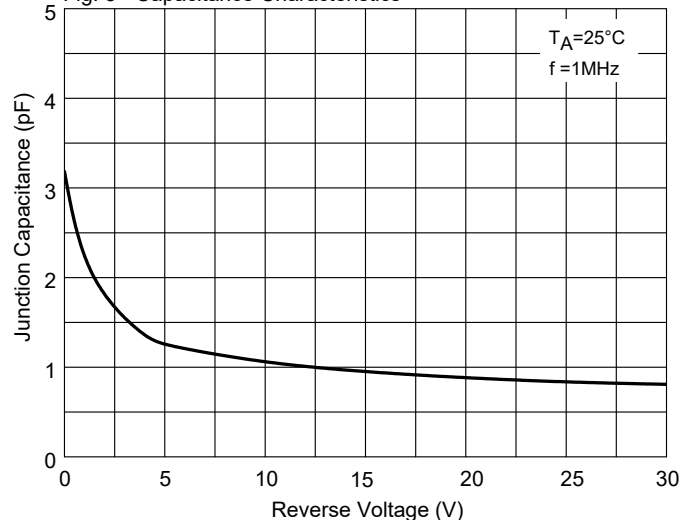
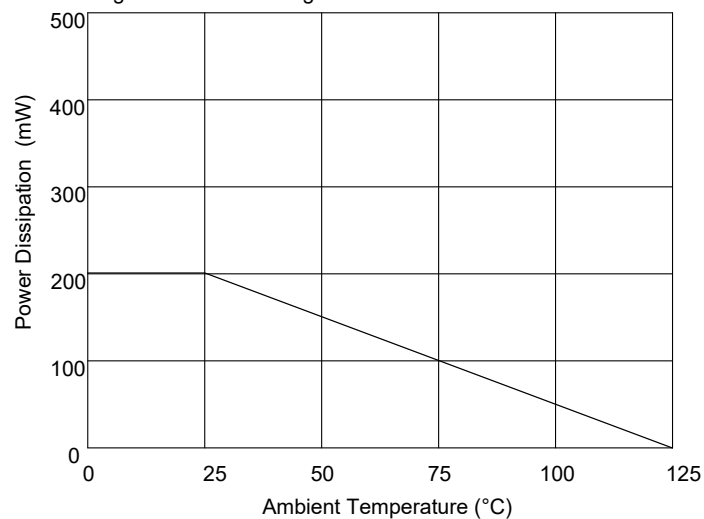


Fig. 4 - Power Derating Curve



## Ordering Information

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

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