

**Features**

- Low Turn-on Voltage
- Fast Switching
- Microminiature Plastic Package
- This Device is Protected by a PN Junction Guard Ring Against Excessive Voltage, Such as Electrostatic Discharge.
- 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 +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD107WS	SG	30V	21V	30V

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

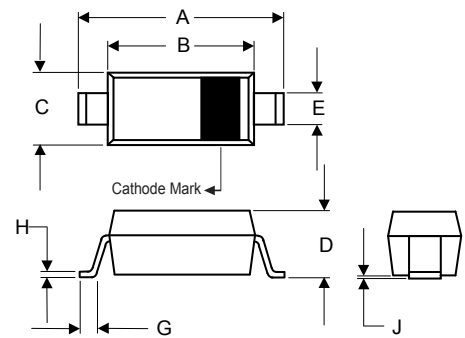
Average Forward Current	$I_{F(AV)}$	0.1A	
Peak Forward Surge Current	$I_{FSM}$	0.75A	$t_p=10ms$
Power Dissipation	$P_d$	250mW <sup>(2)</sup>	
Instantaneous Forward Voltage	$V_F$	550mV(Max) 800mV(Max) 300mV(Typ) 360mV(Typ) 470mV(Typ) 580mV(Typ)	$I_F=50mA$ $I_F=100mA$ $I_F=2.0mA$ $I_F=15mA$ $I_F=50mA$ $I_F=100mA$
Minimum Reverse Breakdown Voltage	$V_{BR}$	30V	$I_R=100\mu A$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1000nA	$V_R=25V$
Maximum Junction Capacitance	$C_J$	7.0pF	Measured at 1.0MHz, $V_R=10.0V$

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 electrodes are kept at ambient temperature

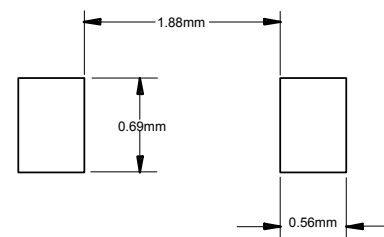
**250mW, 30 Volt Schottky Barrier Diode**

**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

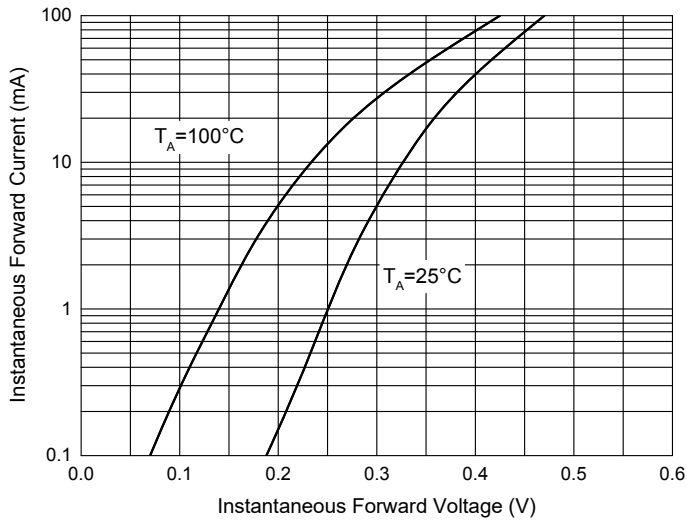


Fig. 2 - Typical Reverse Leakage Characteristics

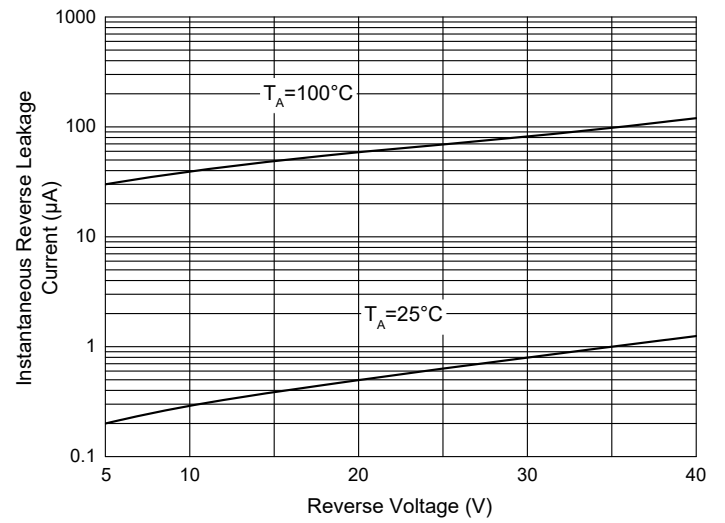
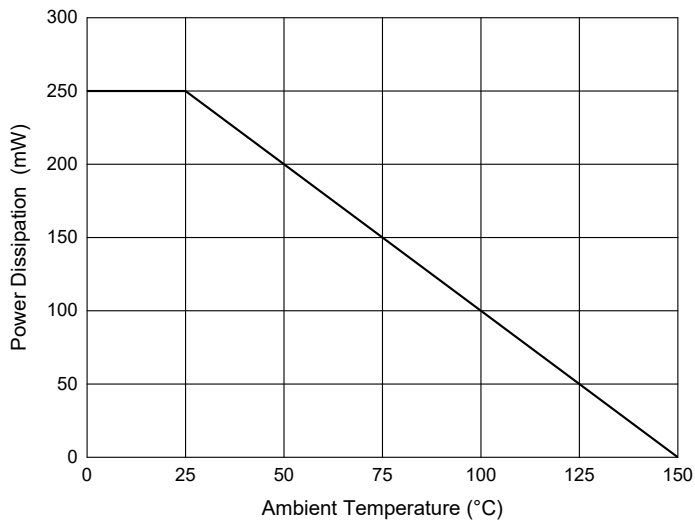


Fig. 3 - Power Derating Curve



## Ordering Information

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

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