

Features

- Guard Ring Construction for Transient Protection
- Low Forward Voltage Drop
- 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: 500°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103AX	Š4	40V	28V	40V

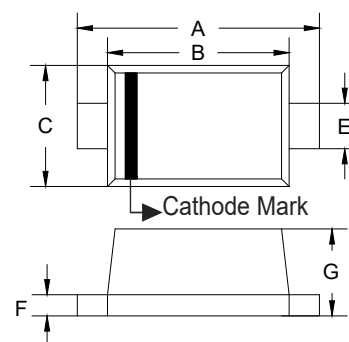
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I_F	350mA	
Peak Forward Surge Current	I_{FSM}	1.0A	$t \leq 1.0s$
Maximum Power Dissipation	P_d	200mW	
Maximum Forward Voltage	V_F	370mV 600mV	$I_{FM} = 20mA$ $I_{FM} = 200mA$
DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA(Max)	$V_R = 30V$
Typical Junction Capacitance	C_j	50pF	Measured at 1.0MHz, $V_R=0.0V$
Typical Reverse Recovery Time	t_{rr}	10ns	$I_F = I_R = 200mA$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$

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

200mW, 40Volt Small Signal Schottky Diode

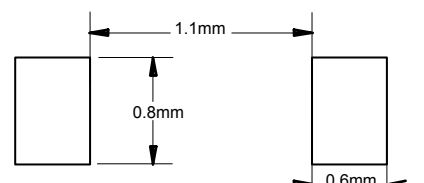
SOD-523



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

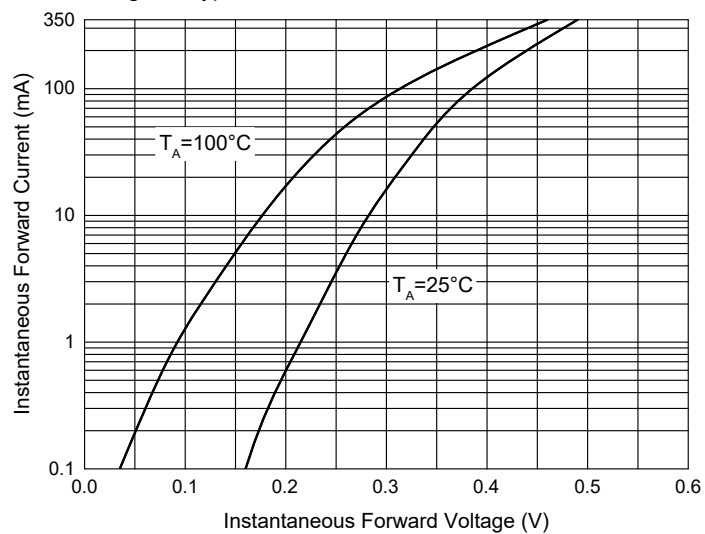


Fig. 2 - Typical Reverse Leakage Characteristics

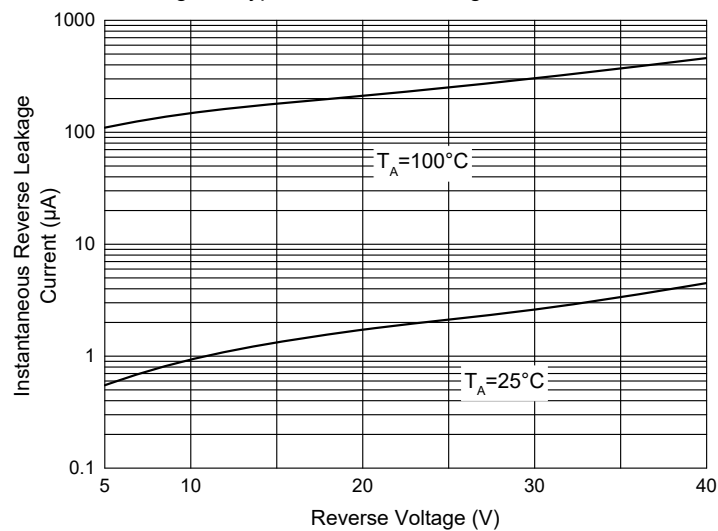
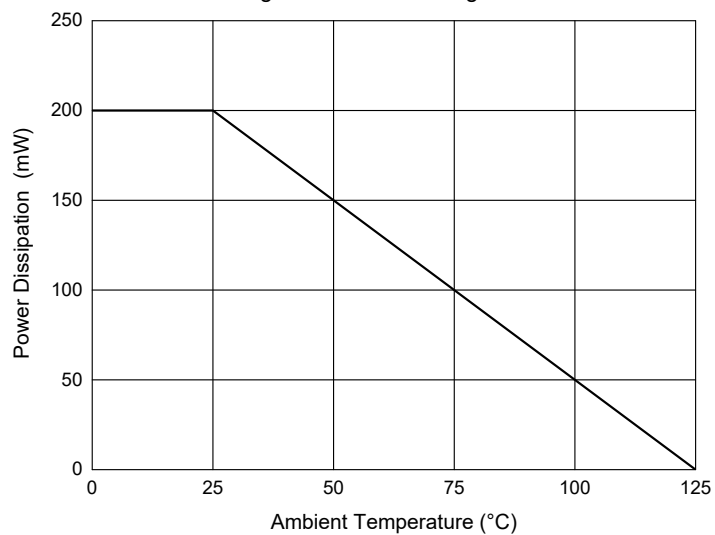


Fig. 3 - Power Derating Curve



Ordering Information

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

For packaging details, go to our website at <https://www.mccsemi.com/pdf/productpackaging/SOD-523%20Package.pdf>

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