

**Features**

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Extremely Low Thermal Resistance
- For Surface Mount Application and High Current Capability
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 244°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B0520WTL	SD	20V	14V	20V

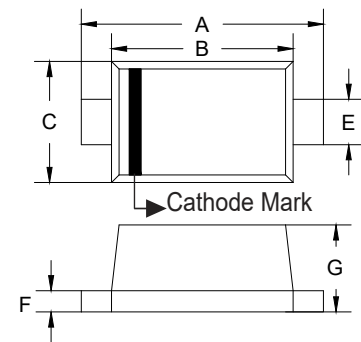
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	0.5A	$T_L = 100^\circ\text{C}$
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	5.5A	8.3ms Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.30V	$I_F = 0.1\text{A}, T_J = 25^\circ\text{C}$
		0.385V	$I_F = 0.5\text{A}, T_J = 25^\circ\text{C}$
		0.22V	$I_F = 0.1\text{A}, T_J = 100^\circ\text{C}$
		0.33V	$I_F = 0.5\text{A}, T_J = 100^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	75µA	$V_R = 10\text{V}, T_J = 25^\circ\text{C}$
		250µA	$V_R = 20\text{V}, T_J = 25^\circ\text{C}$
		5.0mA	$V_R = 10\text{V}, T_J = 100^\circ\text{C}$
		8.0mA	$V_R = 20\text{V}, T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	170pF	$V_R = 0, f = 1\text{MHz}$
Power Dissipation	$P_D$	200mW	

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

**0.5 Amp Low VF Schottky Rectifier  
20 Volts**

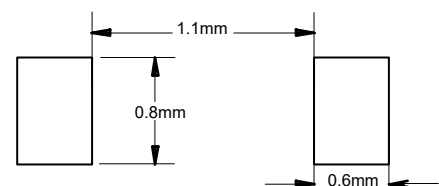
**SOD-523**



**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 - Forward Characteristics

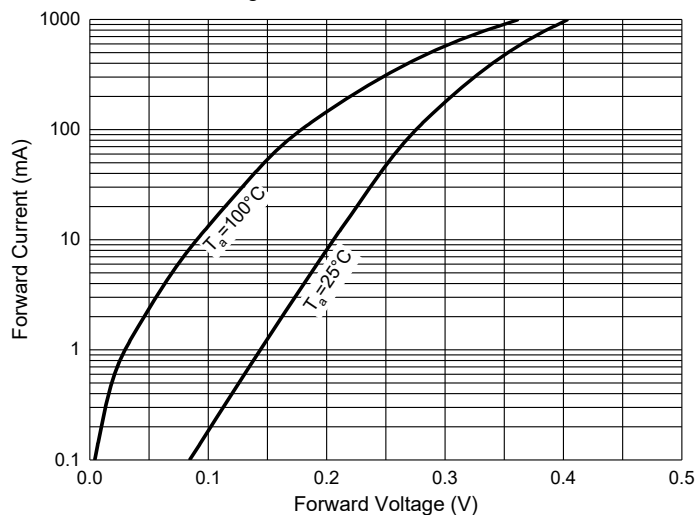


Fig. 2 - Reverse Characteristics

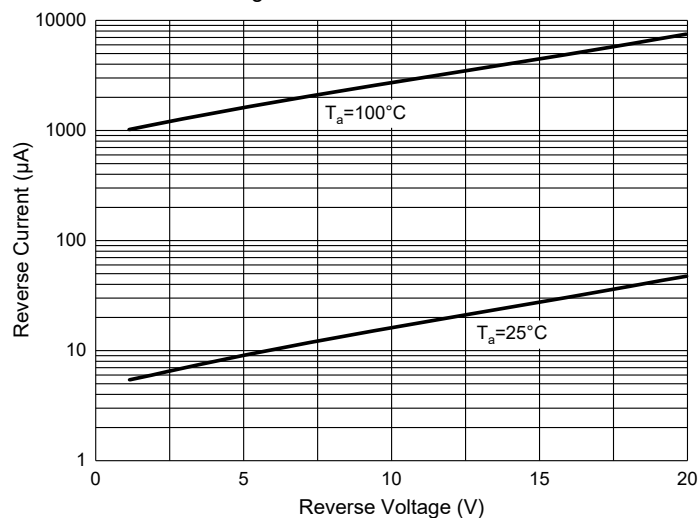
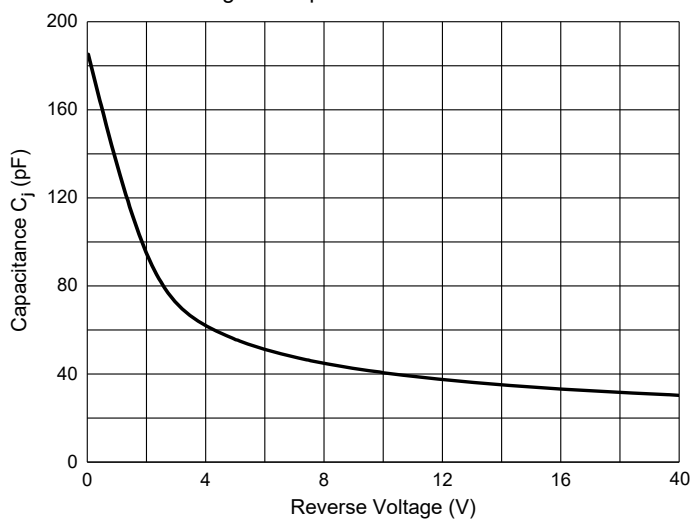


Fig. 3 - Capacitance Characteristics



## Ordering Information

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

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