

**Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Reliability
- Low Reverse Current and Low Forward Voltage
- Small Surface Mount Type
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 1)

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
RB520S-40	D1	40V	40V

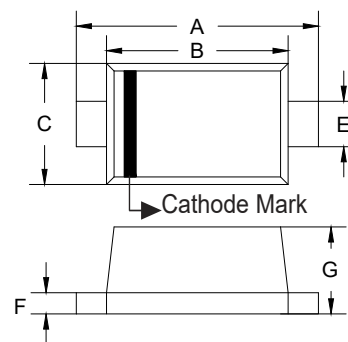
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Mean Rectifying Current	$I_O$	200mA	
Peak Forward Surge Current	$I_{FSM}$	1A	$t=8.3ms$
Power Dissipation	$P_D$	150mW	
Forward Voltage	$V_F$	0.30V(Typ) 0.39V(Max) 0.45V(Typ) 0.55V(Max)	$I_F=10mA;$ $I_F=100mA;$
Reverse Current	$I_R$	0.6µA(Typ) 1.0µA(Max) 2.8µA(Typ) 10µA(Max)	$V_R = 10V$ $V_R = 40V$

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

**200 mA  
Schottky Barrier  
Diode  
40 Volts**

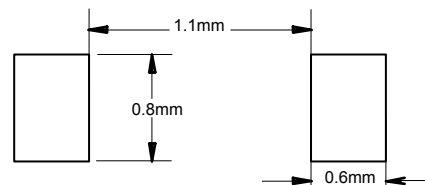
**SOD-523**



**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

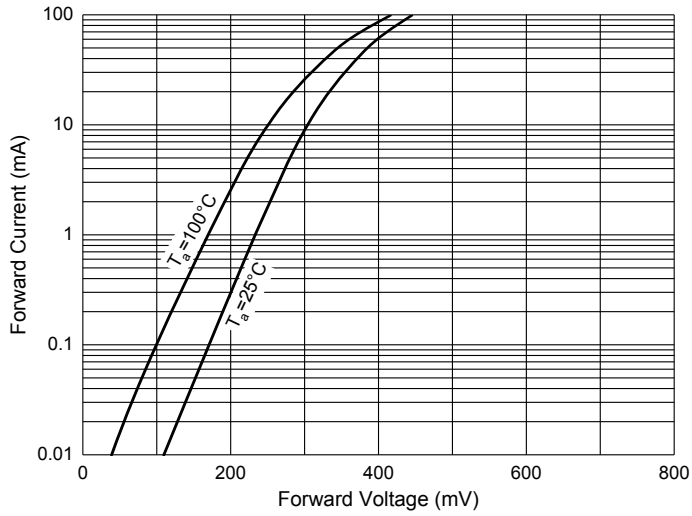


Fig. 2 - Reverse Characteristics

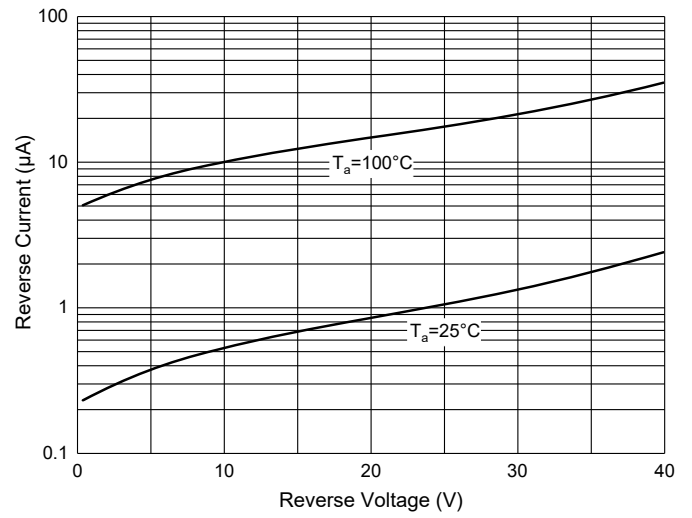


Fig. 3 - Capacitance Characteristics

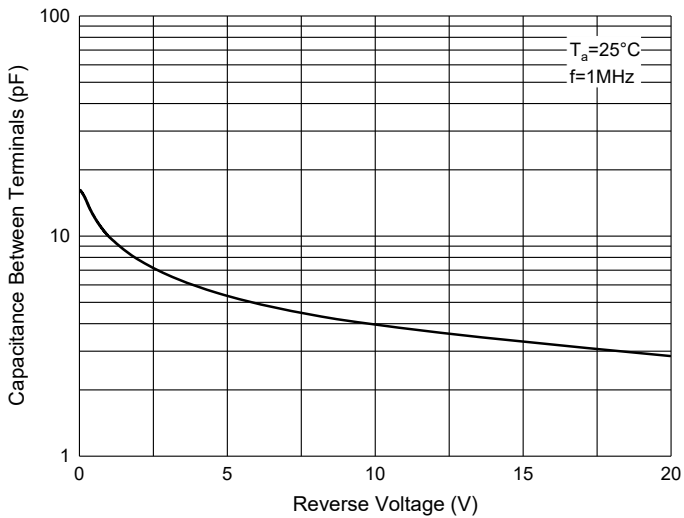
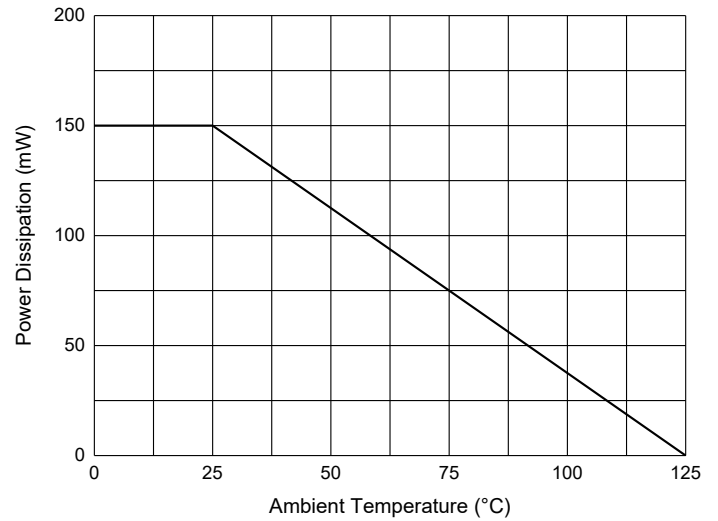


Fig. 4 - Power Derating Curve



## Ordering Information

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

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