

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 RMS Voltage	Maximum DC Blocking Voltage
RB521S-40	S	40V	28V	40V

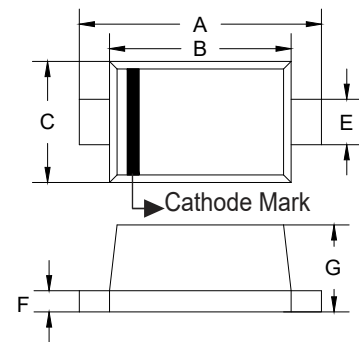
Electrical Characteristics @ 25°C Unless Otherwise Specified

Non-repetitive peak reverse voltage	V_{RM}	45V	
Average Rectified Output Current	I_O	200mA	
Non-repetitive Peak Forward Surge Current	I_{FSM}	1A	t=8.3ms
Power Dissipation	P_D	150mW	
Forward Voltage	V_F	0.16V(Min) 0.30V(Max) 0.31V(Min) 0.45V(Max) 0.38V(Min) 0.54V(Max)	$I_F=10mA;$ $I_F=100mA;$ $I_F=200mA;$
Reverse Current	I_R	20µA(Max) 90µA(Max)	$V_R = 10V$ $V_R = 40V$
Reverse Breakdown Voltage	$V_{(BR)}$	40V(Min)	$I_R=100µA$

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

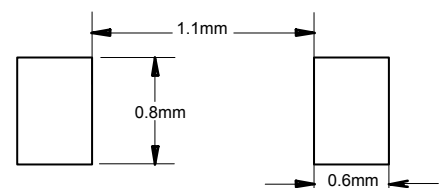
**200 mA
Schottky Barrier
Diode
40 Volts**

SOD-523



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

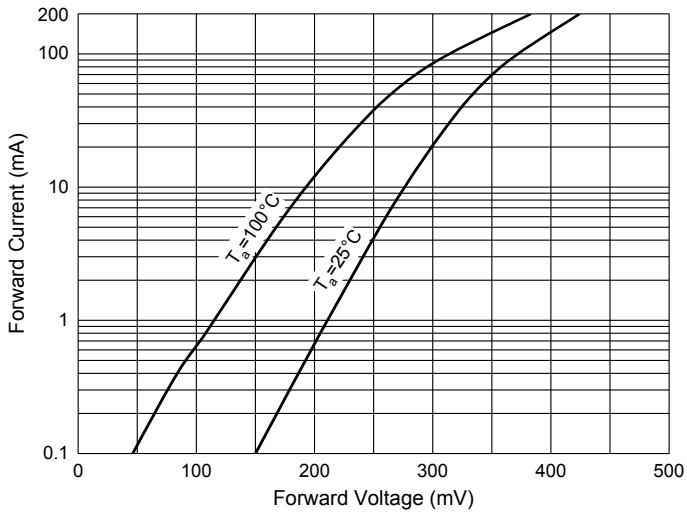


Fig. 2 - Reverse Characteristics

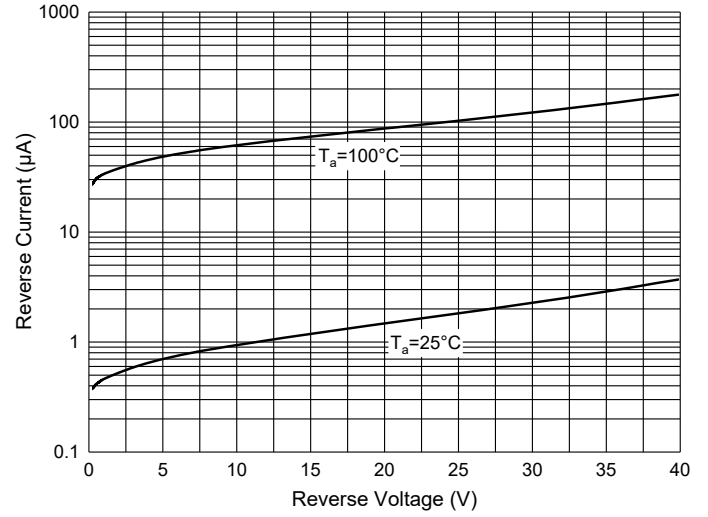
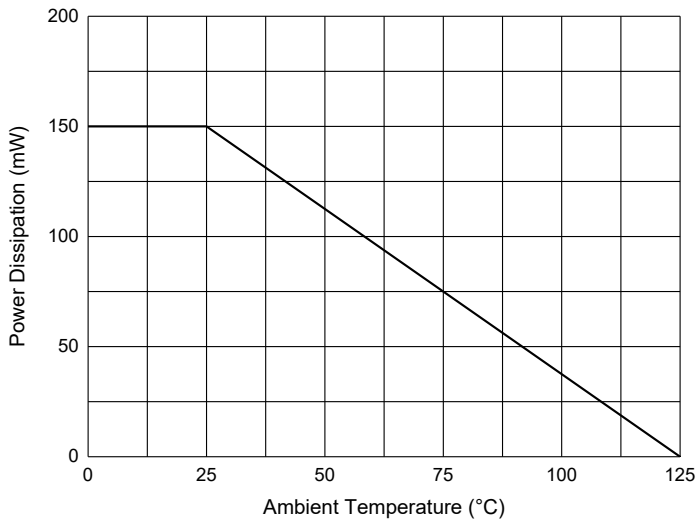


Fig. 3 - Power Derating Curve



Ordering Information

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

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