

**Features**

- Halogen Free. "Green" Device (Note 1)
- Low Voltage, Low Inductance
- High Current Rectifier Schottky Diode
- For Power Supply
- Epoxy Meets UL 94 V-0 Flammability Rating
- 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(Note2): 500°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RB751S-40	40V	28V	40V

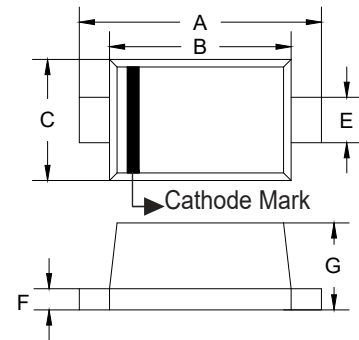
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Mean Rectifying Current	$I_O$	30mA	
Non-Repetitive Peak Forward Current	$I_{FSM}$	500mA	$t=8.3ms$
Power Dissipation	$P_D$	200mW	
Forward Voltage	$V_F$	0.37V(Max)	$I_F=1mA$
Reverse Current	$I_R$	0.5µA(Max)	$V_R = 30V$
Minimum Reverse Breakdown Voltage	$V_{(BR)}$	30V	$I_R=10µA$
Capacitance Between Terminals	$C_T$	2pF	$V_R=1V, f=1MHz$
Max Reverse Recovery Time	$t_{rr}$	7.0ns	$I_R=I_F=10mA$ $I_{rr}=1mA,$ $R_L=100Ω$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
2. Part mounted on FR-4 board with recommended pad layout.

**40 Volts  
Schottky Barrier  
Diode**

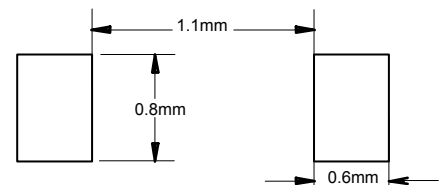
**SOD-523**



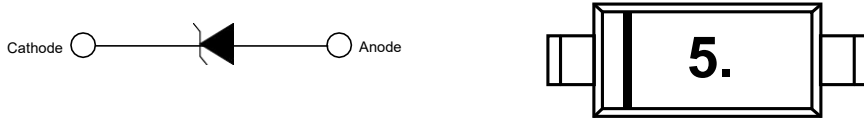
**DIMENSIONS**

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**



## Internal Structure and Marking Code



## Curve Characteristics

Fig. 1 - Forward Characteristics

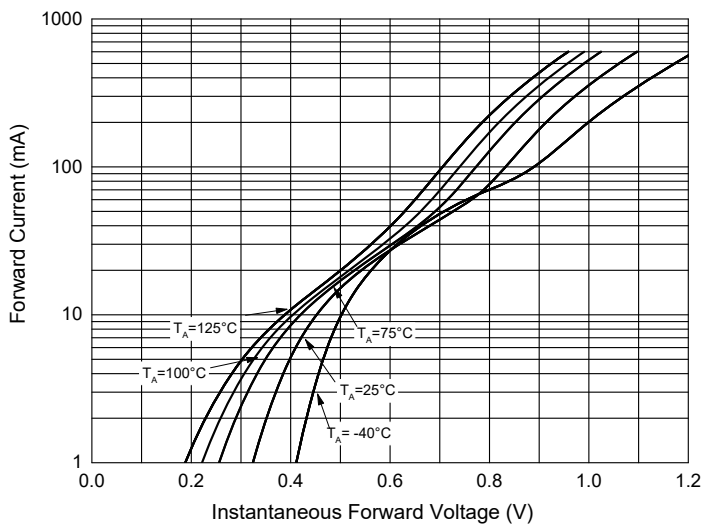


Fig. 2 - Reverse Characteristics

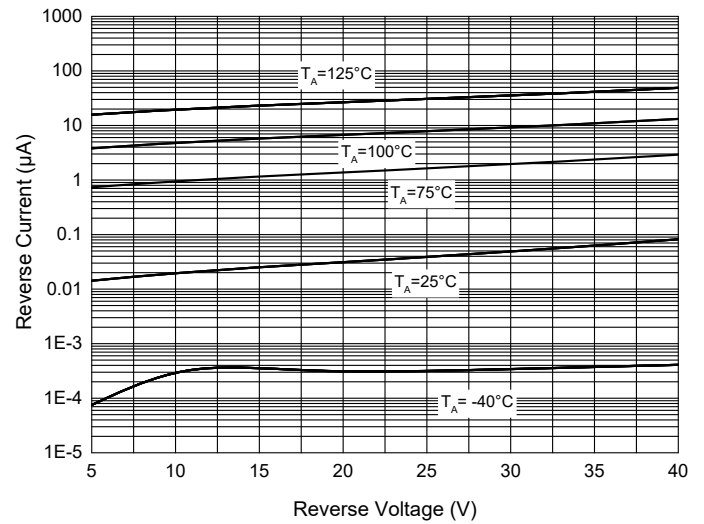


Fig. 3 - Capacitance Characteristics

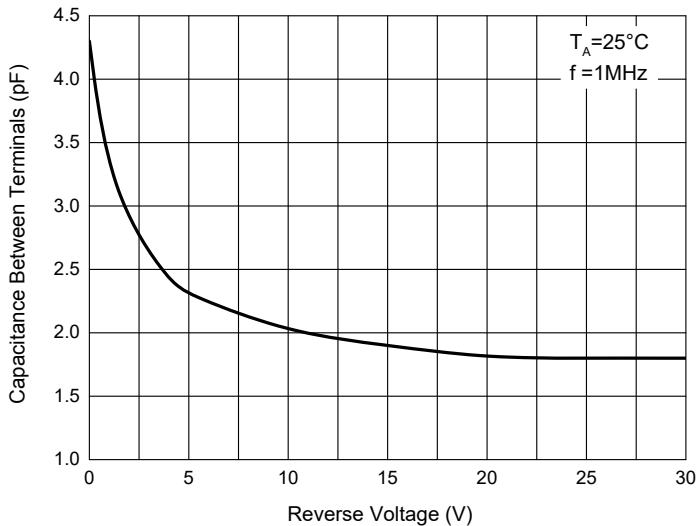
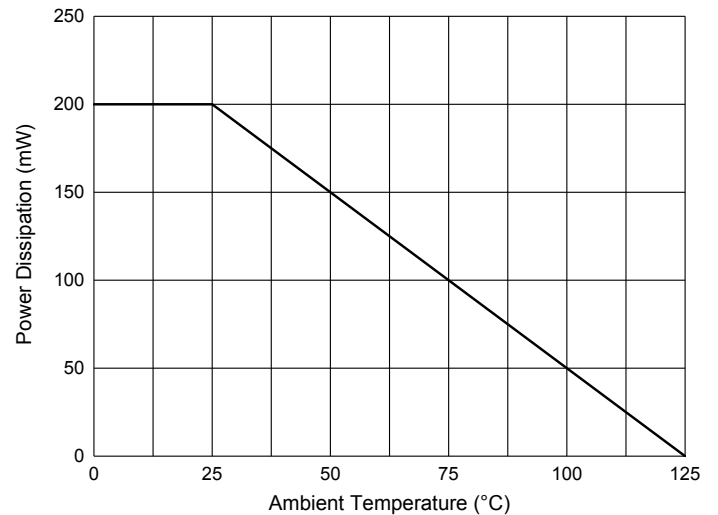


Fig. 4 - Power Derating Curve



## Ordering Information

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

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