

**Features**

- Extremely-Fast Switching Speed
- 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
BAT54WX	JV	30V	21V	30V

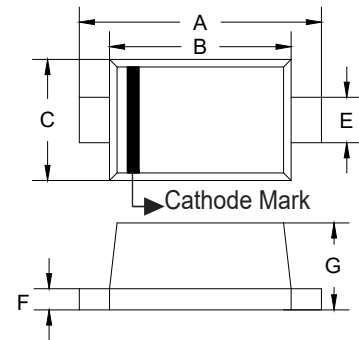
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_F$	200mA	
Peak Forward Surge Current	$I_{FSM}$	600mA	$t=8.3ms$
Repetitive Peak Forward Current	$I_{FRM}$	300mA	$t_p \leq 1s$ ; Duty Cycle $\leq 50\%$
Power Dissipation	$P_d$	200mW	
Reverse Breakdown Voltage	$V_{(BR)}$	30V(Min)	$I_R=10\mu A$
Maximum Forward Voltage	$V_F$	0.24V 0.50V 0.80V 0.32V 0.40V	$I_F=0.1mA$ $I_F=30mA$ $I_F=100mA$ $I_F=1.0mA$ $I_F=10mA$
DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2 $\mu A$ (Max)	$V_R = 25V$
Maximum Junction Capacitance	$C_T$	10pF	$V_R=1V, f=1MHZ$
Maximum Reverse Recovery Time	$t_{rr}$	5.0ns	$I_F=10mA, I_R=10mA$ to 1mA, $R_L=100\Omega$

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, 30Volt Schottky Barrier Diode**

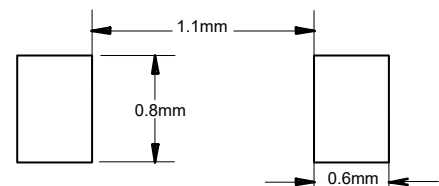
**SOD-523**



**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**



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

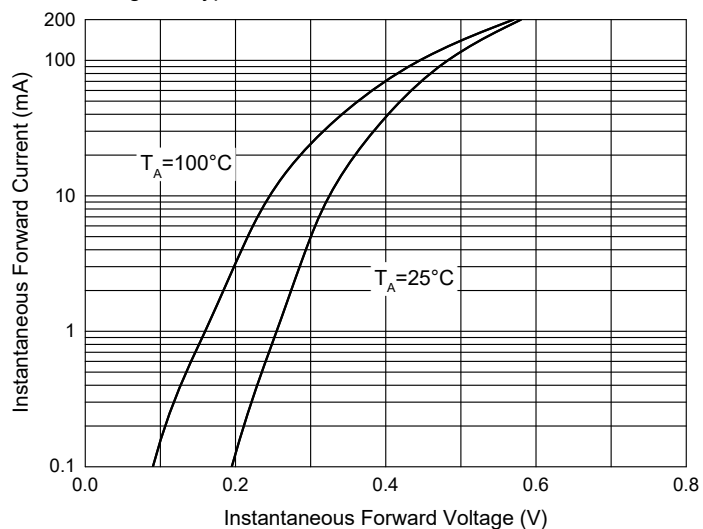


Fig. 2 - Typical Reverse Leakage Characteristics

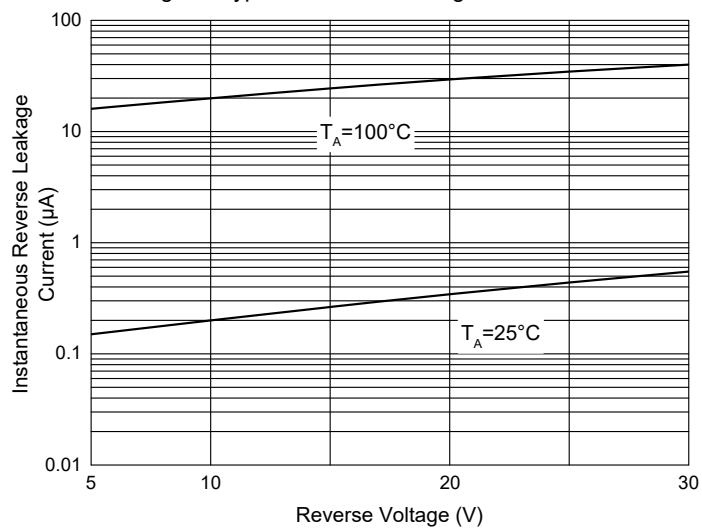
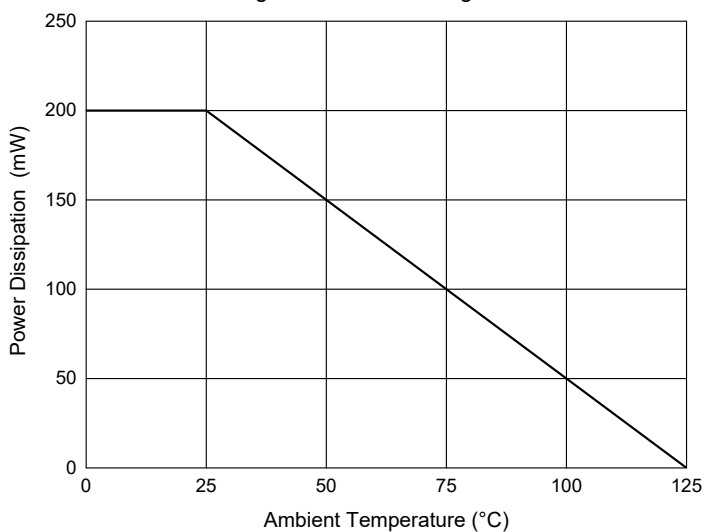


Fig. 3 - Power Derating Curve



## Ordering Information

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

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