

**Features**

- Halogen Free. "Green" Device (Note 1)
- Fast Switching Speed
- Surface Mount Package Ideally Suited For Automatic Insertion
- Low Forward Voltage Drop.
- 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: 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
BAT43X	S8	30V	21V	30V

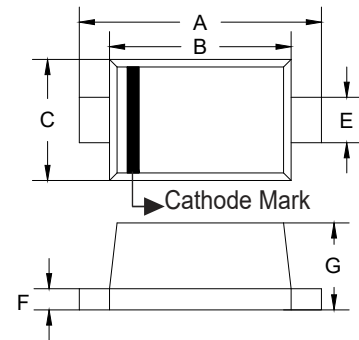
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Forward Continuous Current	$I_{FM}$	200mA	
Repetitive Peak Forward Surge Current	$I_{FRM}$	500mA	$t < 1.0s$
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	4A	$t < 10ms$
Power Dissipation	$P_D$	150mW	
Forward Voltage	$V_F$	0.26V(Min) 0.33V(Max) 0.45V(Max) 1.0V(Max)	$I_F = 2mA;$ $I_F = 15mA;$ $I_F = 200mA;$
Maximum Peak Reverse Current	$I_{RM}$	500nA	$V_R = 25V$
Junction Capacitance	$C_J$	10pF(Max)	$V_R = 1V, f = 1.0MHz$
Reverse Recovery Time	$T_{RR}$	5ns(Max)	$I_F = I_R = 10mA$ $I_{rr} = 0.1I_R$ $R_L = 100\Omega$

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

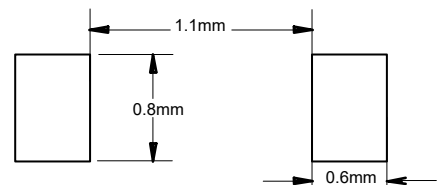
**Schottky Barrier Diode  
150mW**

**SOD-523**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

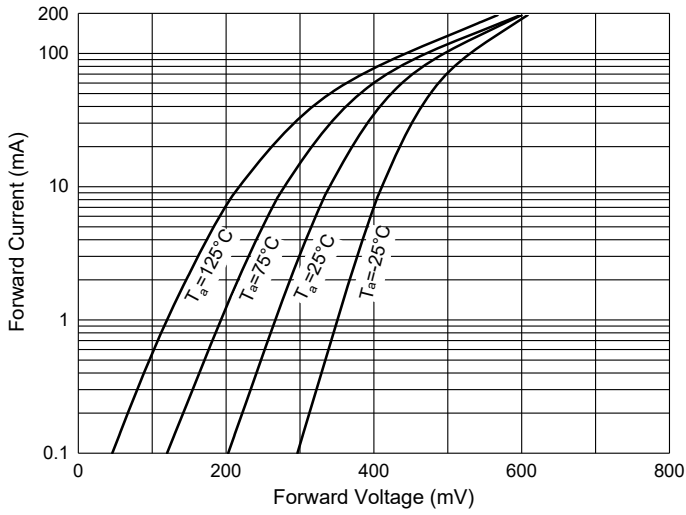


Fig. 2 - Reverse Characteristics

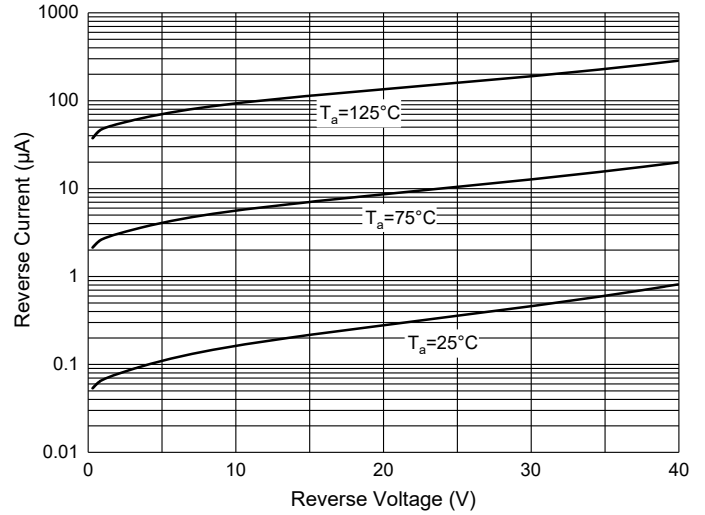


Fig. 3 - Capacitance Characteristics

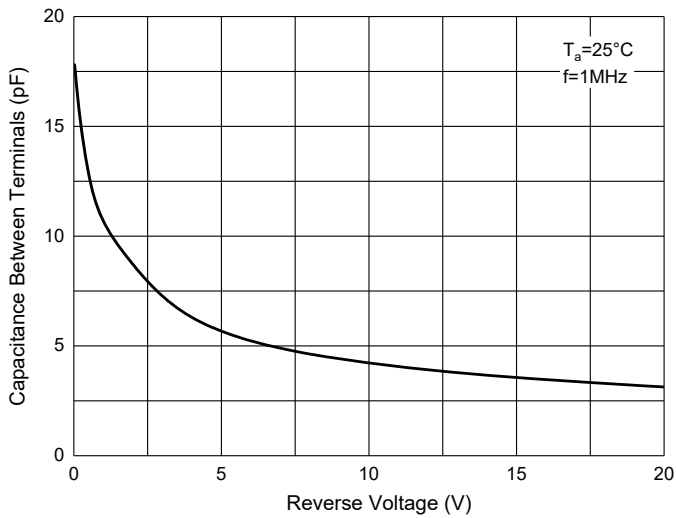
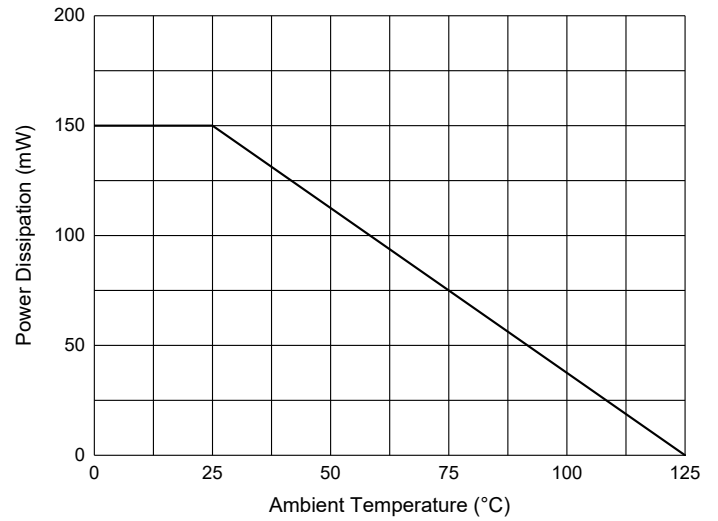


Fig. 4 - Power Derating Curve



## Ordering Information

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

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