

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Fully Automotive Qualified to AEC-Q101

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note2); 667°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	DC Blocking Voltage V_R
BAT54WXHQ	30V	21V	30V

Electrical Characteristics @ 25°C Unless Otherwise Specified

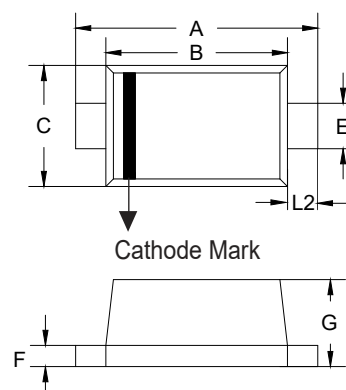
Forward Continuous Current	I_F	200mA	
Forward Surge Current	I_{FSM}	2.5A	$t_p = 8.3\text{ms}$ half sine wave
Power Dissipation	P_D	150mW	$T_A = 25^\circ\text{C}$
Max Forward Voltage	V_F	240mV 320mV 400mV 500mV 1000mV	$I_F=0.1\text{mA};$ $I_F=1.0\text{mA};$ $I_F=10\text{mA};$ $I_F=30\text{mA};$ $I_F=100\text{mA};$
Max Reverse Current	I_R	2 μA	$V_R=25\text{V}$
Min Reverse Breakdown Voltage	$V_{(BR)}$	30V	$I_R = 100\mu\text{A}$
Max Junction Capacitance	C_J	10pF	Measured at 1.0MHz, $V_R=1.0\text{V}$
Max Reverse Recovery Time	t_{rr}	5ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1I_R,$ $R_L=100\Omega$

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

Note: 2. Part mounted on FR-4 board with recommended pad layout.

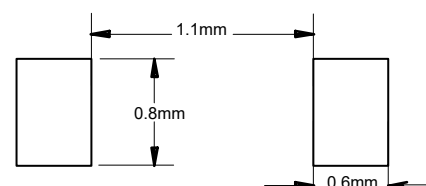
200mA, 30Volt Schottky Barrier Diode

SOD-523

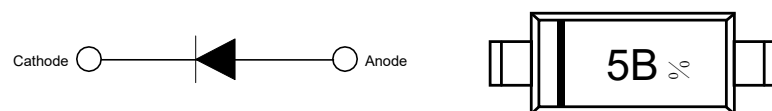


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.043	0.051	1.10	1.30	
C	0.030	0.033	0.75	0.85	
E	0.010	0.014	0.25	0.35	
F	0.003	0.008	0.08	0.20	
G	0.020	0.026	0.50	0.65	
L2	0.004	0.012	0.10	0.30	

Suggested Solder Pad Layout



Internal Structure and Marking Code



Note: 3.  =placeholder for date code

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

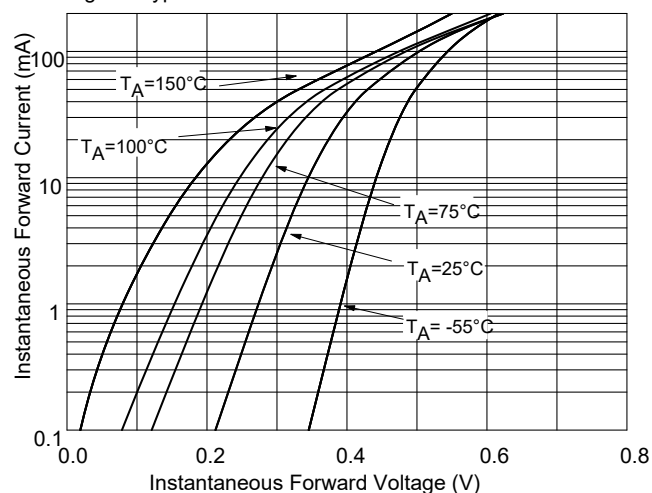


Fig. 2 - Typical Reverse Leakage Characteristics

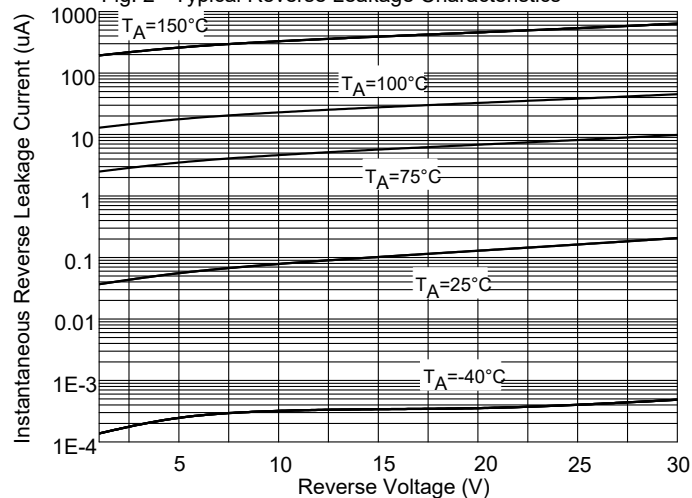


Fig. 3 - Capacitance Characteristics

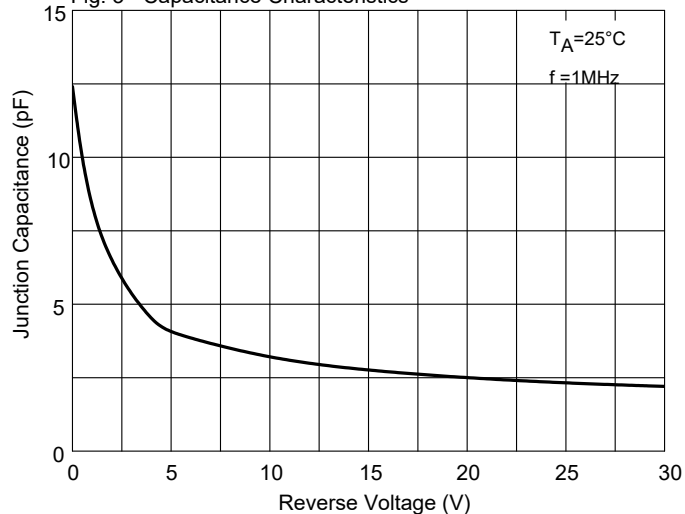
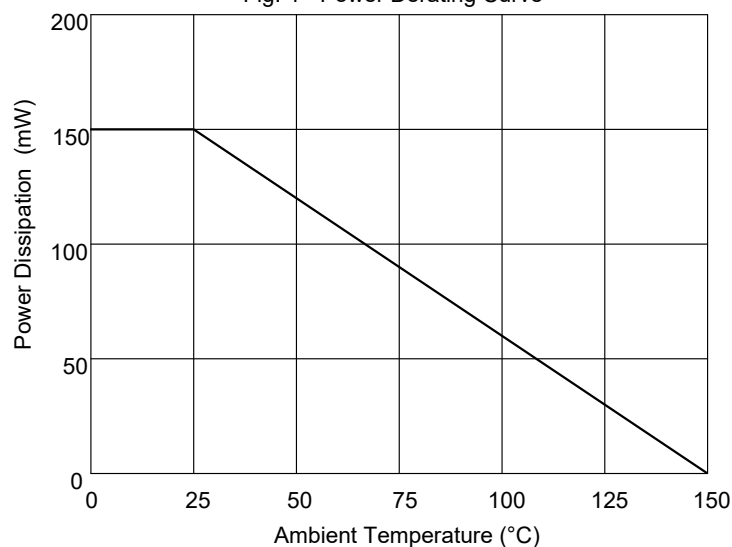


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
BAT54WXHQ-TP	Tape&Reel;8Kpcs/Reel

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