

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Extremely Low Thermal Resistance
- For Surface Mount Application And High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 330°C/W Junction to Ambient (Note 2)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAT165WS	2G	40V	28V	40V

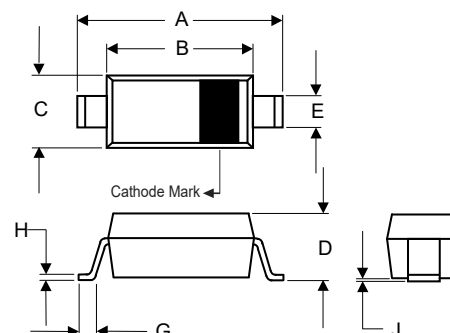
Average Forward Current	$I_{F(AV)}$	0.75A	
Peak Forward Surge Current	I_{FSM}	10A	8.3ms Half Sine
Instantaneous Forward Voltage	V_F	0.29V(Typ.)	$I_F=10mA; T_J=25^\circ C$
		0.38V(Max.)	$I_F=10mA; T_J=25^\circ C$
		0.37V(Typ.)	$I_F=100mA; T_J=25^\circ C$
		0.47V(Max.)	$I_F=100mA; T_J=25^\circ C$
		0.42V(Typ.)	$I_F=250mA; T_J=25^\circ C$
		0.54V(Max.)	$I_F=250mA; T_J=25^\circ C$
		0.48V(Typ.)	$I_F=500mA; T_J=25^\circ C$
		0.64V(Max.)	$I_F=500mA; T_J=25^\circ C$
Reverse Current	I_R	1.2uA(Typ.)	$V_R = 30V; T_J=25^\circ C$
		2uA(Typ.)	$V_R = 40V; T_J=25^\circ C$
		8uA(Max.)	$V_R = 40V; T_J=25^\circ C$
		1.5mA(Typ.)	$V_R = 40V; T_J=125^\circ C$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=10V$
Power Dissipation	P_D	380mW	(Note 2)

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. Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.

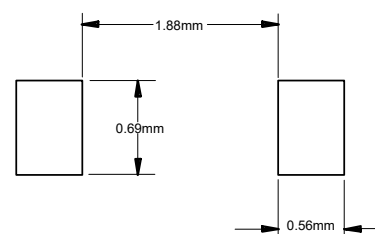
0.75 Amp Schottky Rectifier 40 Volts

SOD-323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Characteristics

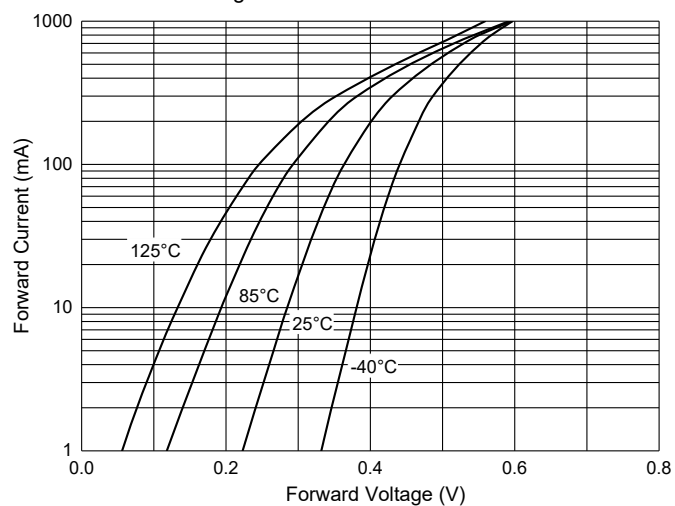


Fig. 2 - Reverse Characteristics

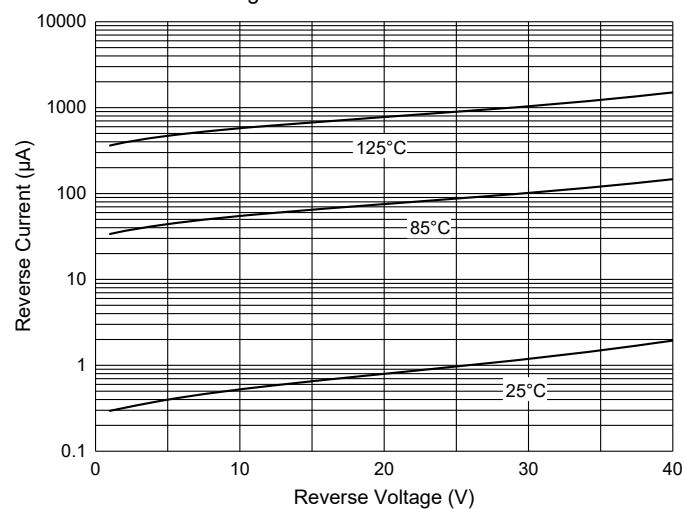


Fig. 3 - Capacitance Characteristics

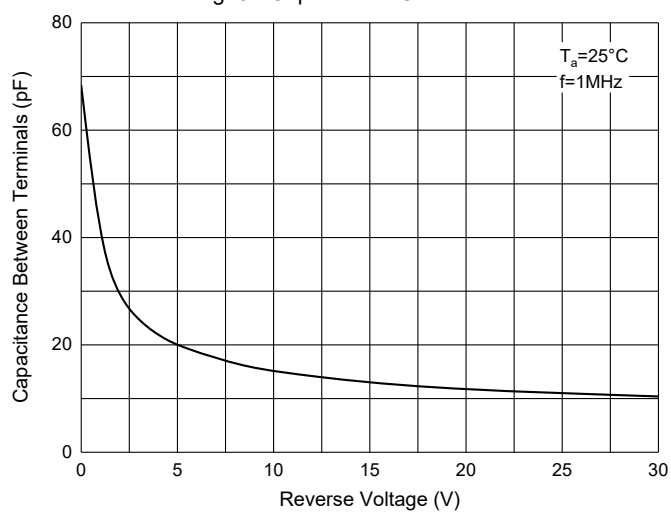
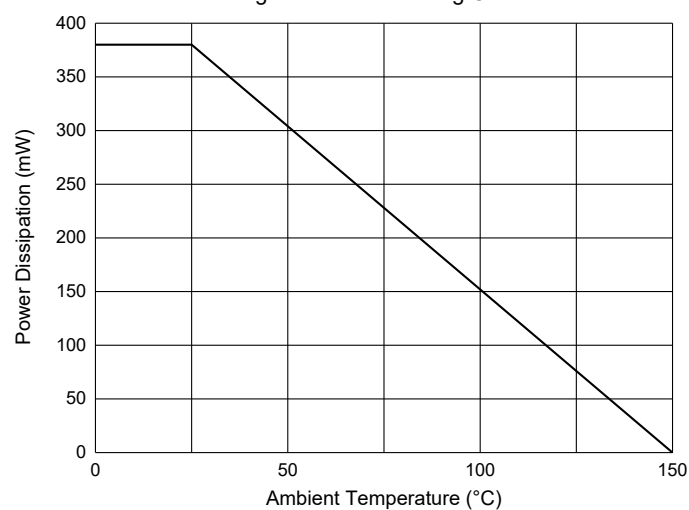


Fig. 4 - Power Derating Curve



Ordering Information

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

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