

**Features**

- High Reliability
- Low Forward Voltage and Low Reverse Current
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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

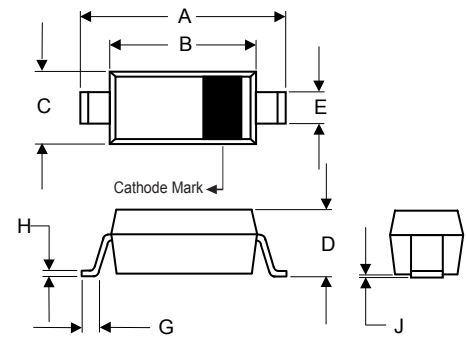
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAT54WS	L9	30V	21V	30V

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

Continuous Forward Current	$I_{F(AV)}$	200mA	
Repetitive Peak Forward Current	$I_{FRM}$	300mA	$t_p \leq 1s$ ; Duty Cycle $\leq 50\%$
Non-Repetitive Peak Forward Current	$I_{FSM}$	600mA	$t = 8.3ms$
Power Dissipation Derate above 25°C	$P_d$	200mW 1.8mW/°C	$T_A = 25^\circ C$
Maximum Forward Voltage at	$V_F$	240mV 320mV 400mV 500mV 1000mV	$I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2.0µA	$V_R = 25V$
Maximum Reverse Breakdown Voltage	$V_{BR}$	>30V	$I_R = 100\mu A$
Reverse Recovery Time	$t_{rr}$	5ns(Max)	$I_F = 10mA$ $I_R = 10mA \sim 1.0mA$ , $R_L = 100\Omega$
Maximum Junction Capacitance	$C_J$	10pF	Measured at 1.0MHz, $V_R = 1.0V$

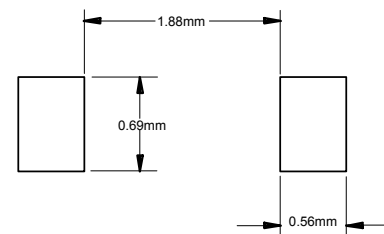
**200mW, 30 Volt Schottky Barrier Diode**

**SOD-323**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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 - Typical Instantaneous Forward Characteristics

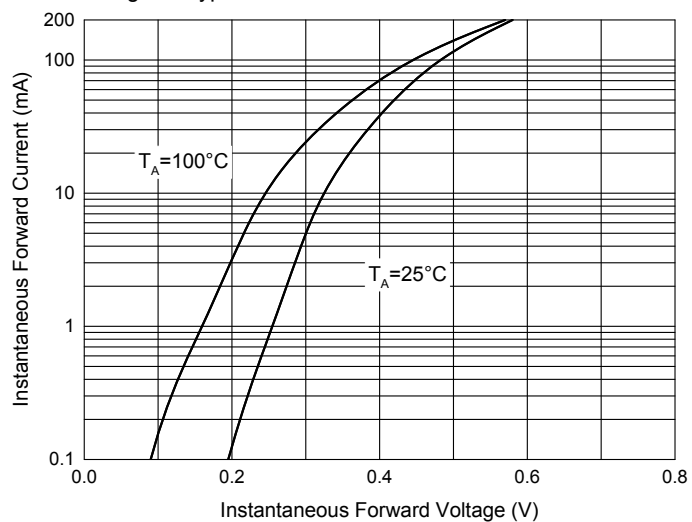


Fig. 2 - Typical Reverse Leakage Characteristics

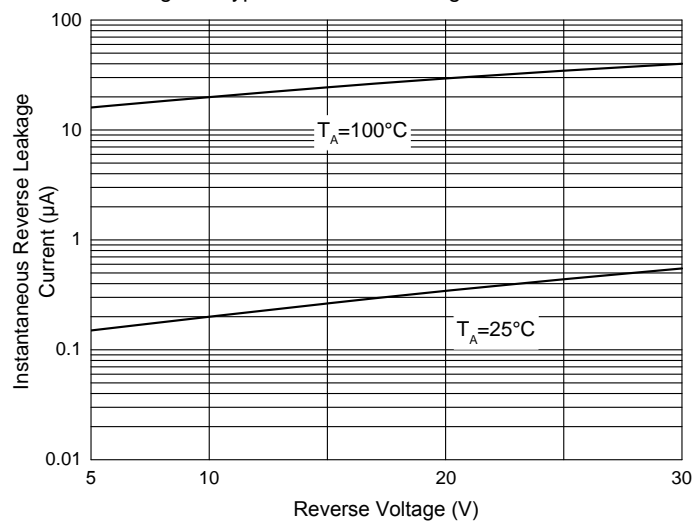
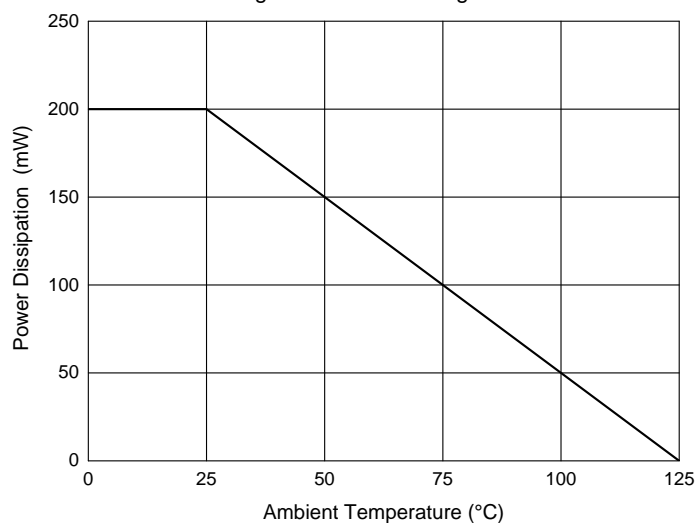


Fig. 3 - Power Derating Curve



## Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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