

## Features

- Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/Rohs Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

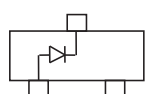
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 400°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54H	L1H	40V	40V
BAT54AH	L2H	40V	40V
BAT54CH	L3H	40V	40V
BAT54SH	L4H	40V	40V

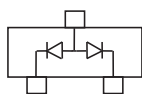
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	300mA	
Non-Repetitive Peak Forward Current	$I_{FSM}$	1.25A	$t=10ms$
Maximum Forward Voltage	$V_F$	240mV 320mV 400mV 500mV 900mV	$I_F=0.1mA$ $I_F=1mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$
Maximum Reverse Current	$I_R$	1 $\mu A$ 100 $\mu A$	$V_R=30V$ $T_J=25^\circ C$ $V_R=30V$ $T_J=100^\circ C$
Maximum Reverse Breakdown Voltage	$V_{BR}$	>40V	$I_R=100\mu A$
Maximum Junction Capacitance	$C_J$	10.0pF	Measured at 1.0MHz, $V_R=1.0V$
Maximum Reverse Recovery Time	$t_{rr}$	5.0ns	$I_F=I_R=10mA$ ; $I_{rr}=0.1 \times I_R$ , $R_L=100\Omega$

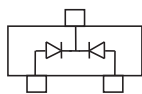
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



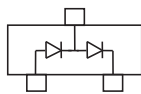
BAT54H



BAT54AH



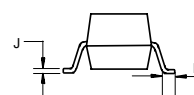
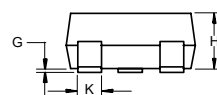
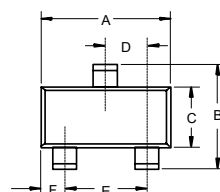
BAT54CH



BAT54SH

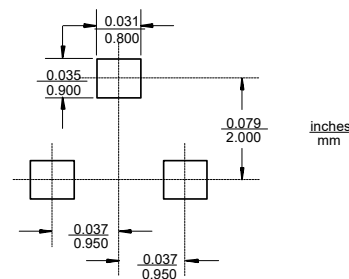
# 300mA, 40V Schottky Barrier Diode

## SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

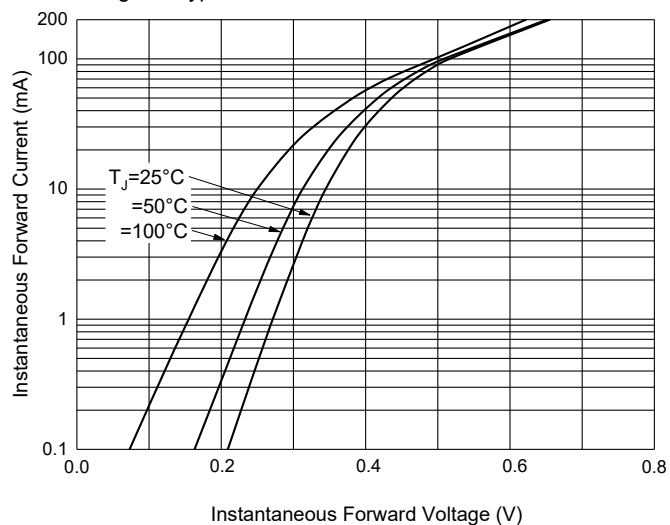


Fig. 2 - Typical Reverse Leakage Characteristics

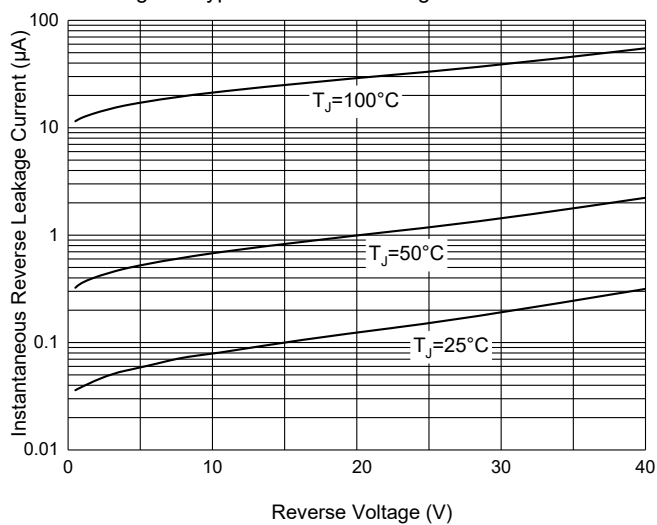
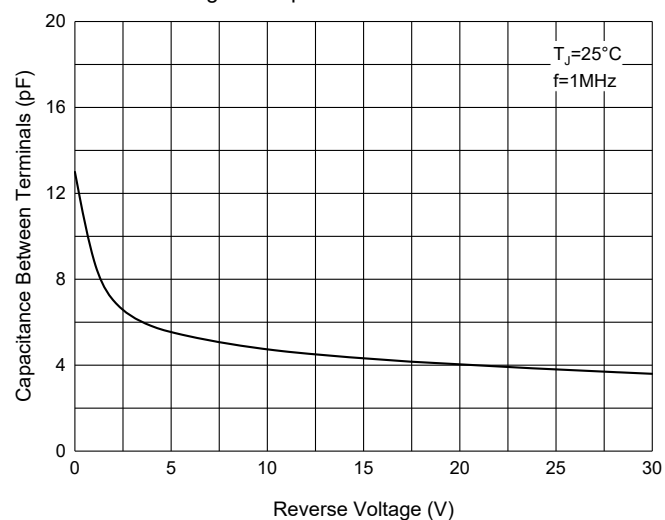


Fig. 3 - Capacitance Characteristics



## Ordering Information

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

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