

## Features

- High Reliability
- Low Forward Voltage and Low Reverse Current
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- 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 +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 550°C/W Junction to Ambient

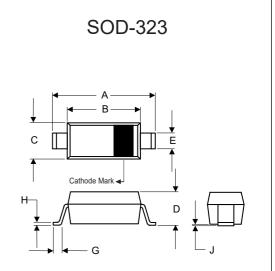
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAT54WSH	L9H	40V	28V	40V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Continuous Forward Current	I <sub>F(AV)</sub>	300mA	
Non-Repetitive Peak Forward Current	I <sub>FSM</sub>	1.25A	t=10ms
Maximum Forward Voltage at	V <sub>F</sub>	240mV 320mV 400mV 500mV 900mV	$I_F=0.1mA$ $I_F=1mA$ $I_F=10mA$ $I_F=30mA$ $I_F100mA$
Maximum Reverse Current	I <sub>R</sub>	1μΑ 100μΑ	V <sub>R</sub> =30V T <sub>J</sub> =25°C V <sub>R</sub> =30V T <sub>J</sub> =100°C
Maximum Reverse Breakdown Voltage	V <sub>BR</sub>	>40V	Ι <sub>R</sub> =100μΑ
Reverse Recovery Time	t <sub>rr</sub>	5ns(Max)	I <sub>F</sub> =I <sub>R</sub> =10mA; I <sub>rr</sub> =0.1×I <sub>R</sub> ,R <sub>L</sub> =100Ω
Maximum Junction Capacitance	CJ	10pF	Measured at 1.0MHz, VR=1.0V

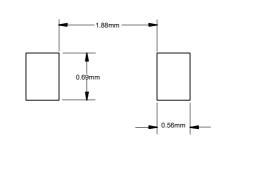
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

# 300mA, 40 Volt Schottky Barrier Diode



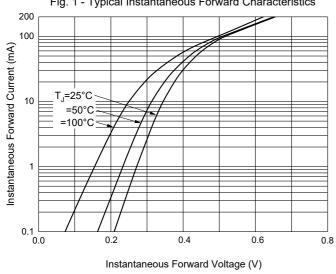
DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
A	0.090	0.107	2.30	2.70		
В	0.063	0.071	1.60	1.80		
С	0.045	0.053	1.15	1.35		
D	0.031	0.045	0.80	1.15		
E	0.010	0.016	0.25	0.40		
G	0.004	0.018	0.10	0.45		
Н	0.004	0.010	0.10	0.25		
J		0.006		0.15		

### Suggested Solder Pad Layout



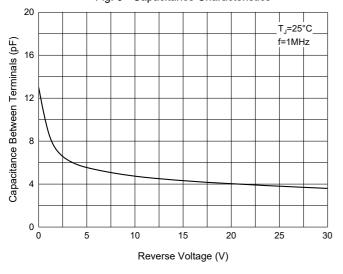


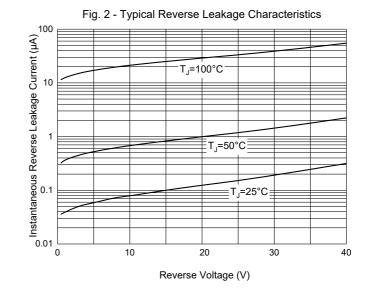
## **Curve Characteristics**



### Fig. 1 - Typical Instantaneous Forward Characteristics







Rev.3-1-01132021





## **Ordering Information**

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

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