



## Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Reliability
- Low Forward Voltage and Low Reverse Current
- Small Surface Mount Type
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Device Marking: L9/JV

## Maximum Ratings

Continuous Reverse Voltage	$V_R$	30V
Continuous Forward Current	$I_F$	200mA
Repetitive Peak Forward Current	$I_{FRM}$	300mA
Non-Repetitive Peak Forward Current $t < 1s$	$I_{FSM}$	600mA
Total Power Dissipation @ $T_A = 25^\circ C$ Derate above $25^\circ C$	$P_D$	200mW 1.8mW/ $^\circ C$
Junction Temperature	$T_j$	125 $^\circ C$
Thermal Resistance Junction to Ambient	$R_{thja}$	500 $^\circ C/W$
Storage Temperature Range	$T_{stg}$	-55 $^\circ C$ to 125 $^\circ C$

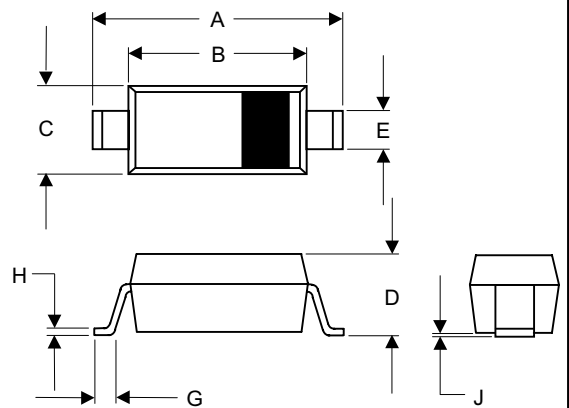
## Electrical Characteristics @ 25 $^\circ C$ Unless Otherwise Specified

Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	$V_F$	240mV 320mV 400mV 500mV 1000mV	
Reverse Current	$I_R$	0.2 $\mu A$ 0.5 $\mu A$	$V_R = 25V$ $V_R = 30V$
Capacitance	$C_J$	2.0pF	Measured at 1.0MHz, $V_R=1.0V$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	
Reverse Recovery Time	$t_{rr}$	5.0ns	$I_F=10mA, I_R=10mA$ to 1mA, $R_L=100 \Omega$

# BAT54WS

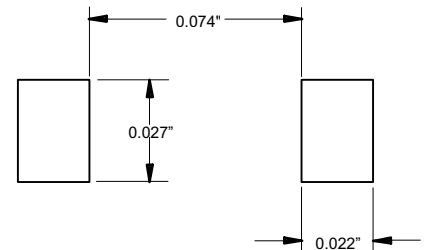
## 200mWatt, 30Volt Schottky Barrier Diode

### SOD-323

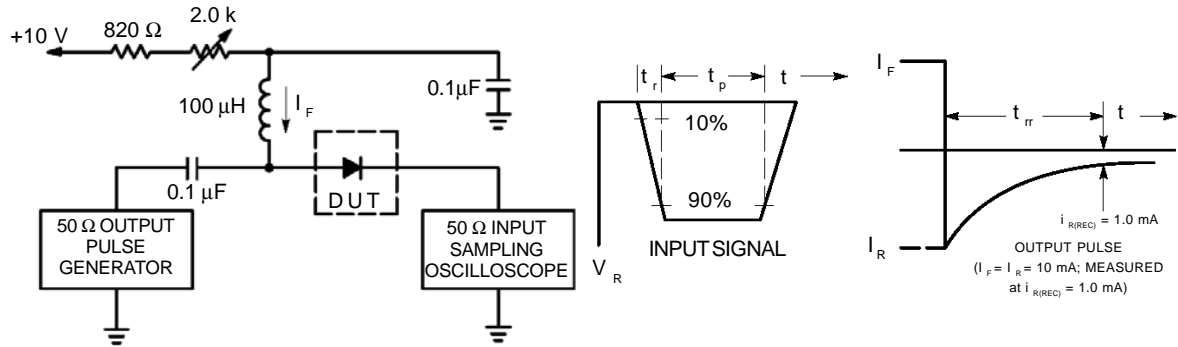


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	----	.006	----	0.15	

### SUGGESTED SOLDER PAD LAYOUT

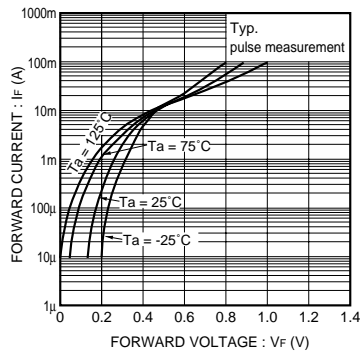


# BAT54WS

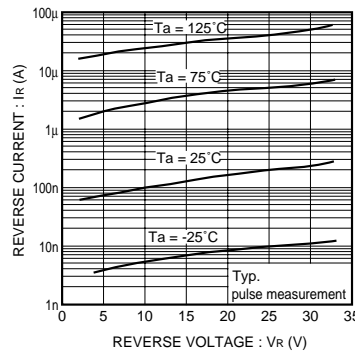


- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10mA.  
 2. Input pulse is adjusted so  $I_{R(peak)}$  is equal to 10mA.  
 3.  $t_p \gg t_{rr}$

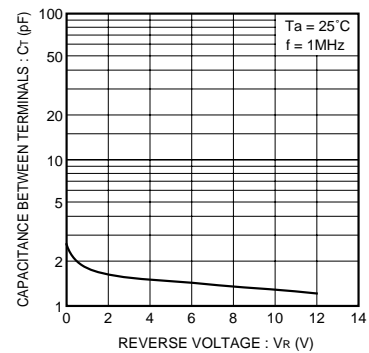
**Figure 1. Recovery Time Equivalent Test Circuit**



**Fig. 2 Forward characteristics**



**Fig. 3 Reverse characteristics**



**Fig. 4 Capacitance between terminals characteristics**



Micro Commercial Components

### Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.