



## 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 $125^\circ C$

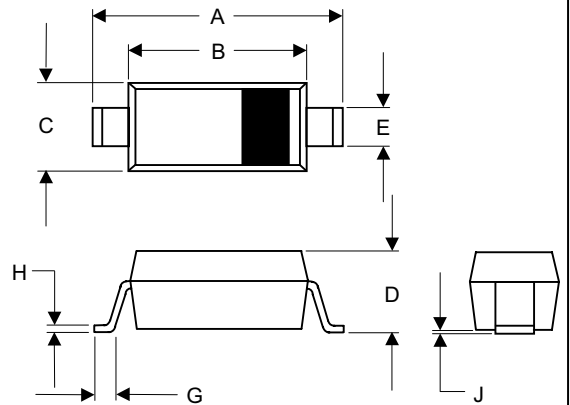
## Electrical Characteristics @ $25^\circ C$ Unless Otherwise Specified

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	$I_R$	2.0uA	$V_R = 25V$
Capacitance	$C_J$	10 pF	Measured at 1.0MHz, $V_R = 1.0V$
Reverse Breakdown Voltage	$V_{(BR)}$	$>30V$	$I_R = 100uA$
Reverse Recovery Time	$t_{rr}$	5.0ns	$I_F = 10mA, I_R = 10mA$ to $1mA, R_L = 100 \Omega$

# BAT54WS

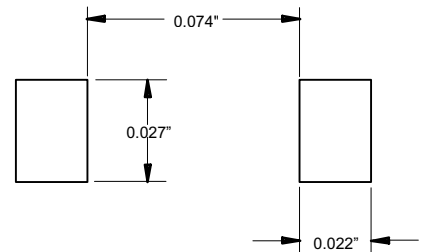
## 200mWatt, 30Volt Schottky Barrier Diode

### SOD-323

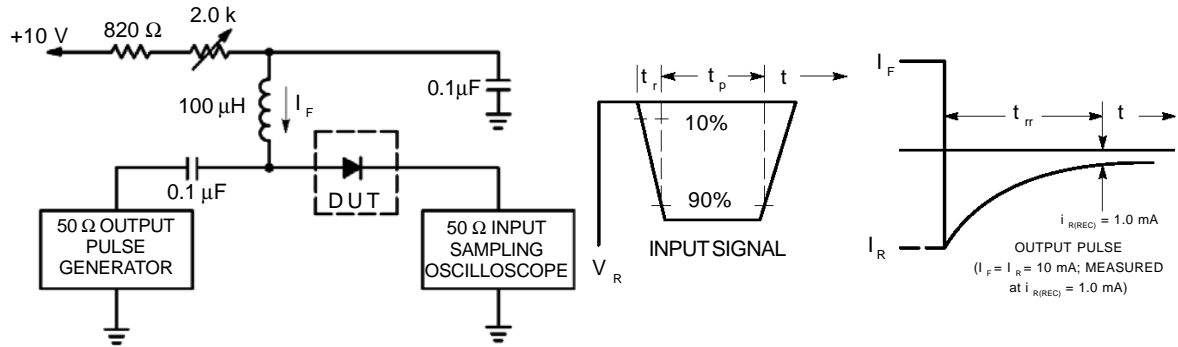


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

### SUGGESTED SOLDER PAD LAYOUT

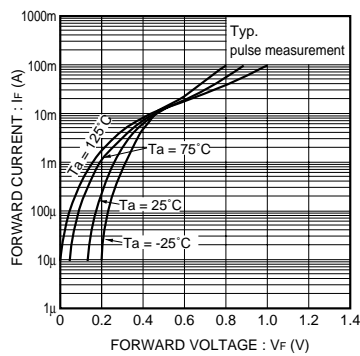


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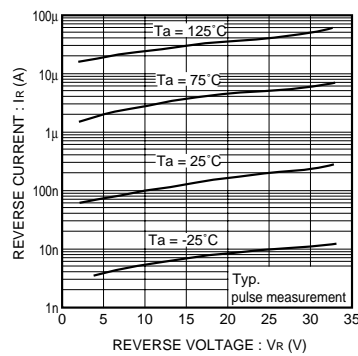


- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10mA.  
 2. Input pulse is adjusted so  $I_{R(peak)}$  is equal to 10mA.  
 3.  $t_p \gg t_{rr}$

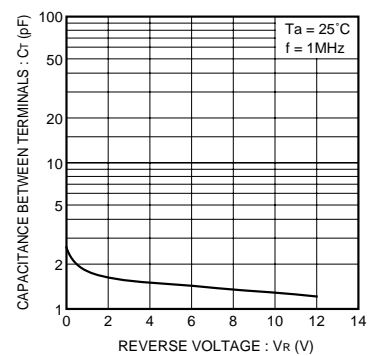
**Figure 1. Recovery Time Equivalent Test Circuit**



**Fig. 2 Forward characteristics**



**Fig. 3 Reverse characteristics**



**Fig. 4 Capacitance between terminals characteristics**



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### 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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