

## 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)

## Maximum Ratings

Continuous Reverse Voltage	$V_R$	30V
Continuous Forward Current	$I_F$	200mA
Total Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	200mW 1.8mW/ $^\circ\text{C}$
Junction Temperature	$T_j$	$125^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	$-55^\circ\text{C}$ to $125^\circ\text{C}$
Device Marking : L9/JV		

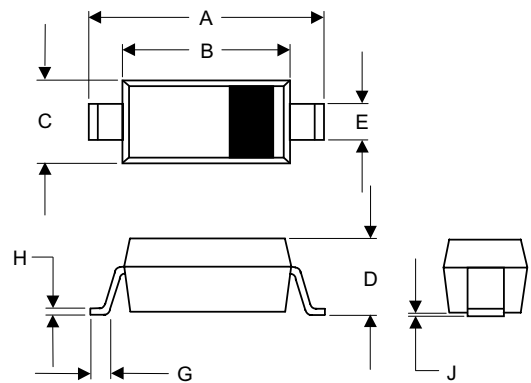
## Electrical Characteristics @ $25^\circ\text{C}$ Unless Otherwise Specified

Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$	$V_F$	240mV 370mV 400mV 500mV 1000mV	
Reverse Current	$I_R$	$0.2\mu\text{A}$ $0.5\mu\text{A}$	$V_R = 25\text{V}$ $V_R = 30\text{V}$
Capacitance	$C_J$	2.0pF	Measured at 1.0MHz, $V_R=1.0\text{V}$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500K/W	

# BAT54WS

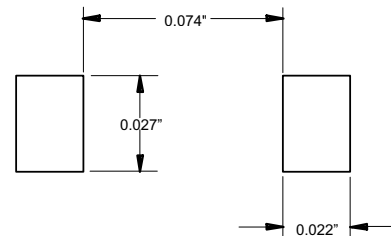
## 200mWatt, 30Volt Schottky Barrier Diode

### SOD-323

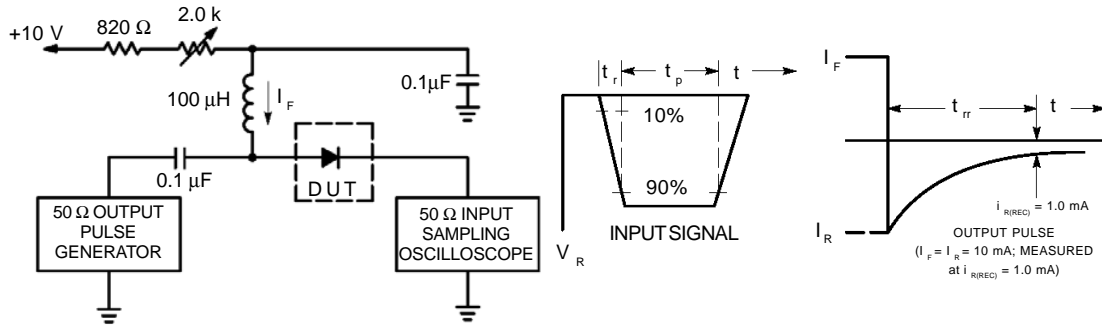


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

#### SUGGESTED SOLDER PAD LAYOUT

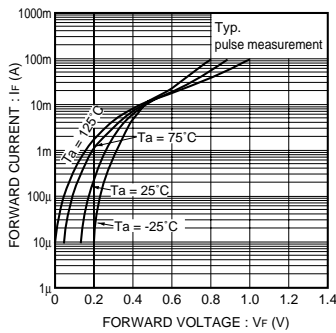


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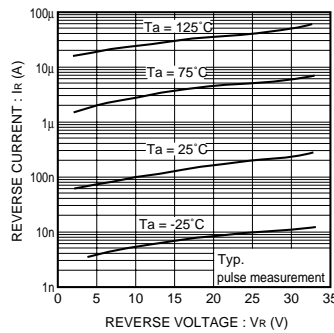


- Notes:
1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10mA.
  2. Input pulse is adjusted so  $I_{R(peak)}$  is equal to 10mA.
  3.  $t_p \gg t_{rr}$

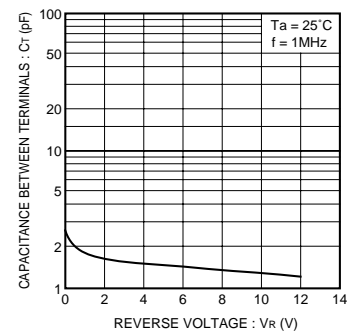
**Figure 1. Recovery Time Equivalent Test Circuit**



**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

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