



Micro Commercial Components



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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 $125^\circ C$

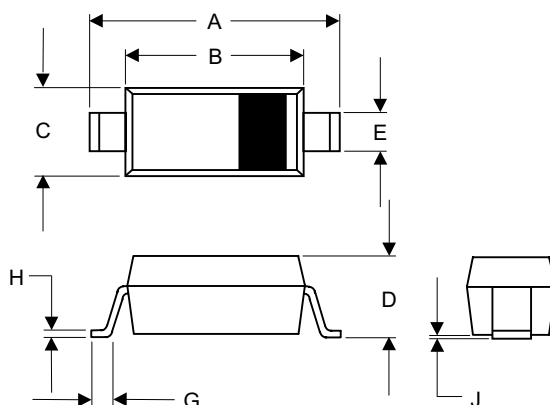
Electrical Characteristics @ $25^\circ C$ Unless Otherwise Specified

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

BAT54WS

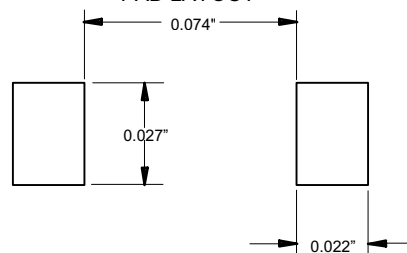
200mWatt, 30Volt Schottky Barrier Diode

SOD-323

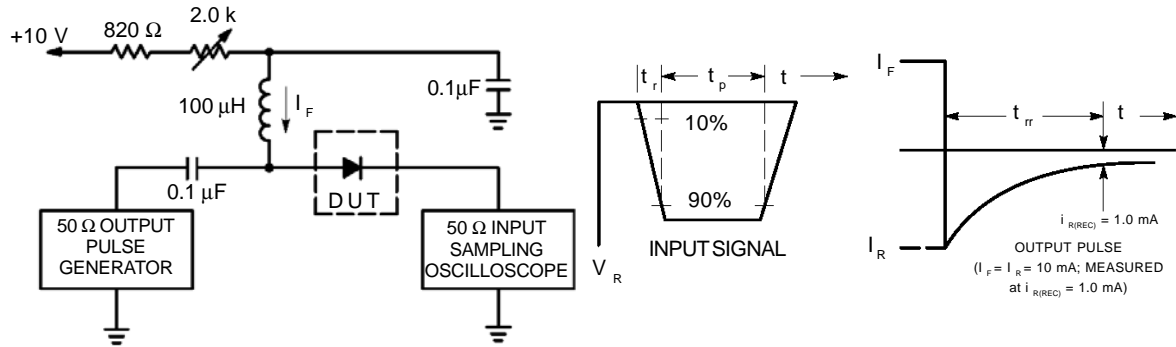


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

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

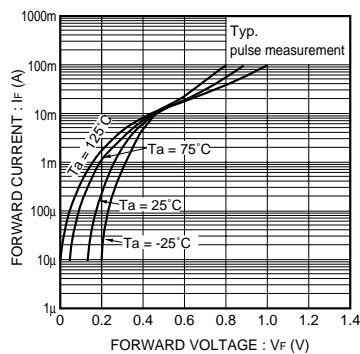


Fig. 2 Forward characteristics

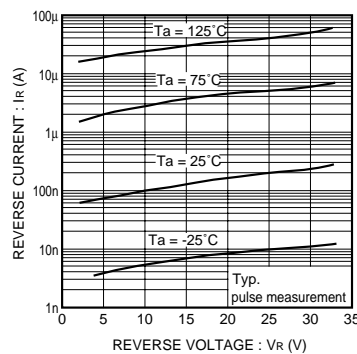


Fig. 3 Reverse characteristics

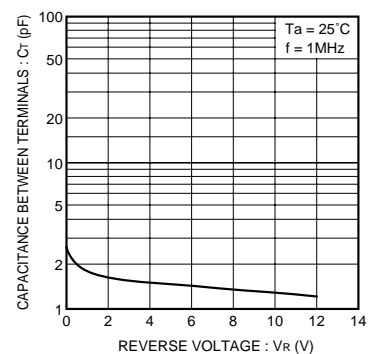


Fig. 4 Capacitance between terminals characteristics

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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