



# THE DATASHEET OF BAT54AWT-TP





Micro Commercial Components



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# BAT54WT thru BAT54SWT

## 200mWatt, 30Volt Schottky Barrier Diode

### Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount SOT-323 Package
- Capable of 200mWatts of Power Dissipation
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Part Number	Device Marking	Type	Pin Configuration
BAT54WT	KL5	Single	Figure 1
BAT54AWT	KL6	Dual	Figure 2
BAT54CWT	KL7	Dual	Figure 3
BAT54SWT	KL8	Dual	Figure 4

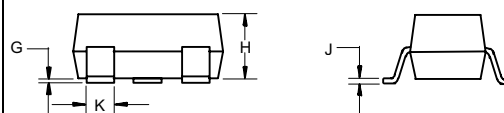
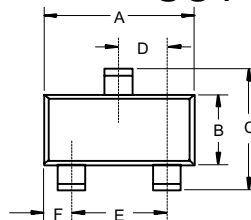
### Maximum Ratings

Continuous Reverse Voltage	$V_R$	30V
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 @ $T_A = 25^\circ C$	$P_D$	200mW
Storage Temperature Range	$T_{stg}$	$-55^\circ C$ to $125^\circ C$
Junction Temperature	$T_j$	$-55^\circ C$ to $125^\circ C$

### Electrical Characteristics @ 25 °C Unless Otherwise Specified

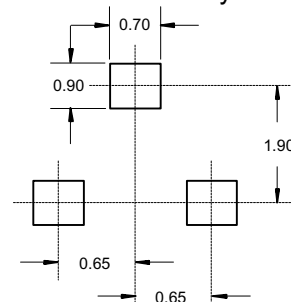
Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	$V_F$	240mV 320mV 400mV 500mV 1000mV	
Reverse Current	$I_R$	2 $\mu A$	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	
Capacitance	$C_J$	10pF	Measured at 1.0MHz, $V_R=1.0V$
Reverse Recovery Time	$t_{rr}$	5nS	$I_F=I_R=10mA$ ; $I_{(REC)} = 1mA$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500K/W	

### SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

### Suggested Solder Pad Layout



# BAT54WT thru BAT54SWT

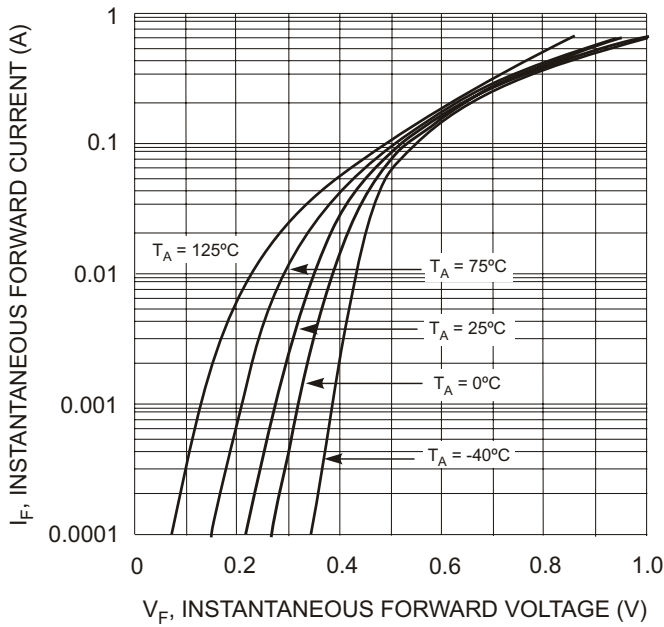


Fig. 1 Forward Characteristics

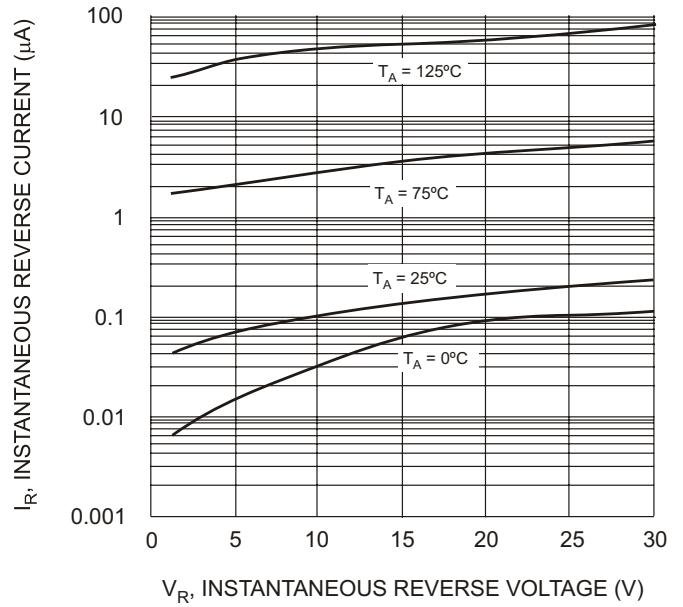


Fig. 2 Typical Reverse Characteristics

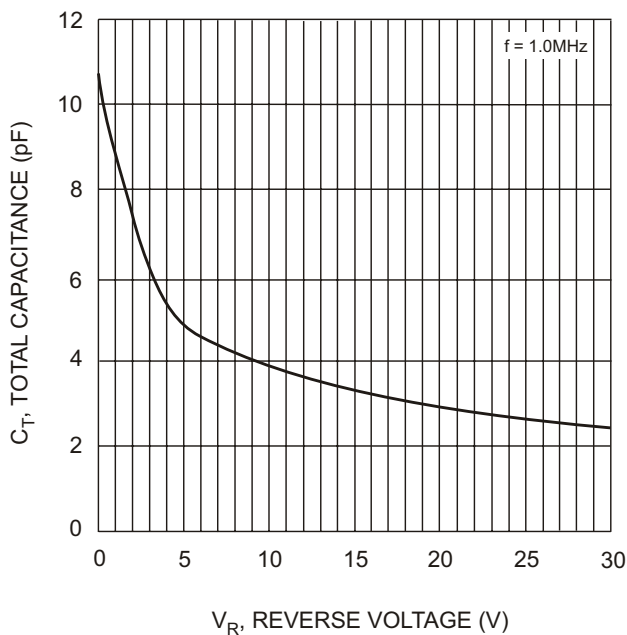


Fig. 3 Typical Capacitance vs. Reverse Voltage

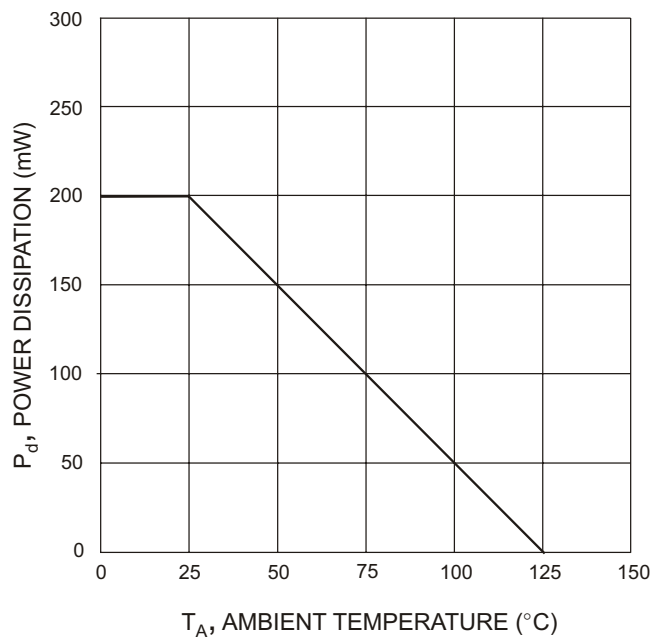


Fig. 4 Power Derating Curve

Pin Configuration - Top View

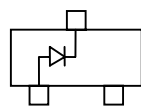


Figure 1

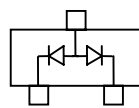


Figure 2

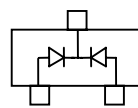


Figure 3

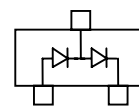


Figure 4



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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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