

BAT54WT thru BAT54SWT

200mWatt, 30Volt Schottky Barrier Diode

Features

- Low Forward Voltage
- Surface Mount SOT-323 Package
- Capable of 200mWatts of Power Dissipation
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

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

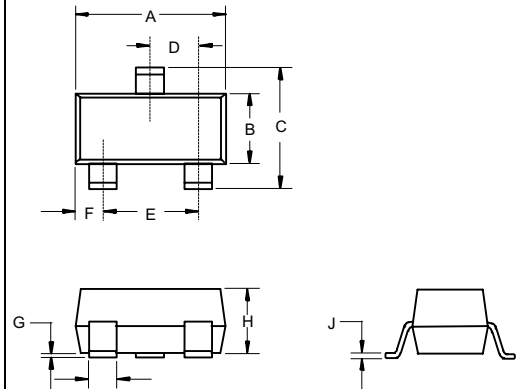
Maximum Ratings

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 $150^\circ C$
Junction Temperature	T_j	$150^\circ C$

Electrical Characteristics @ 25 °C Unless Otherwise Specified

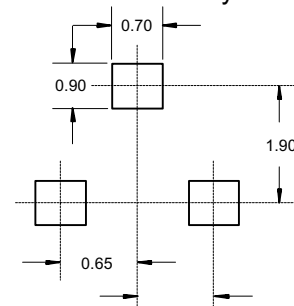
Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	V_F	240mV 320mV 400mV 500mV 1000mV	
Reverse Current	I_R	2 uA	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	
Capacitance	C_J	10pF	Measured at 1.0MHz, $V_R=1.0V$
Reverse Recovery Time	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	.079	.087	2.00	2.20	
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	.012	.016	.30	.40	

Suggested Solder Pad Layout



BAT54WT thru BAT54SWT

TM

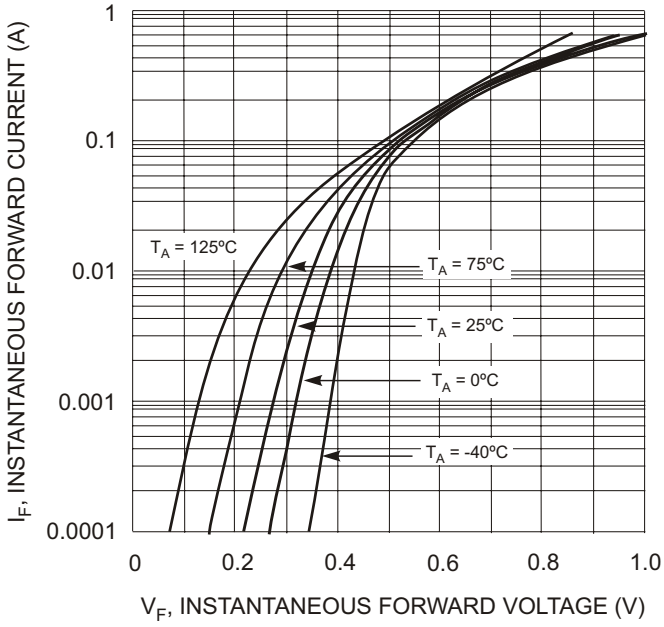


Fig. 1 Forward Characteristics

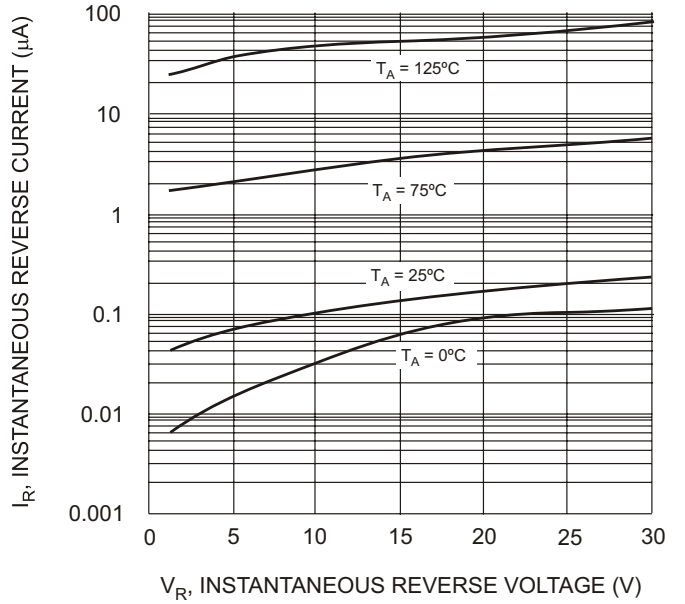


Fig. 2 Typical Reverse Characteristics

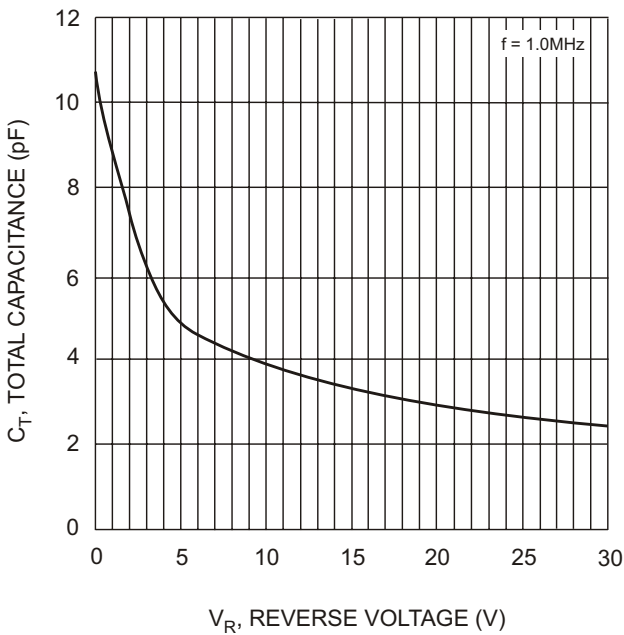


Fig. 3 Typical Capacitance vs. Reverse Voltage

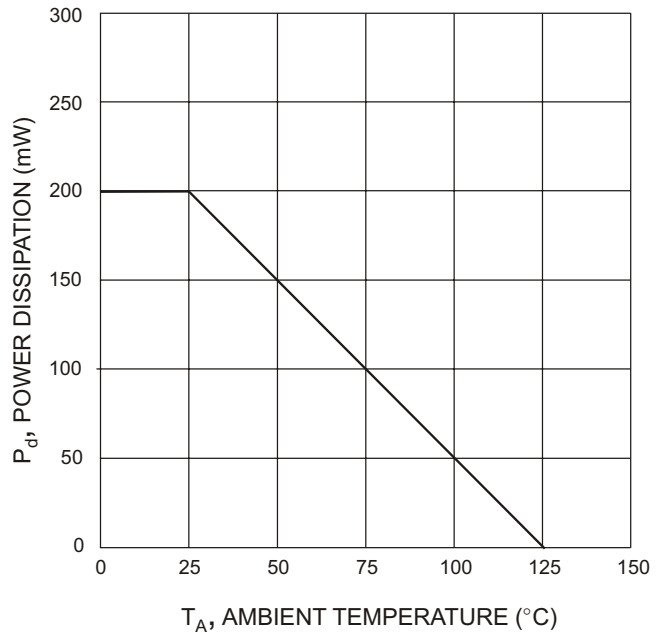


Fig. 4 Power Derating Curve

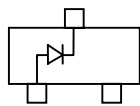


Figure 1

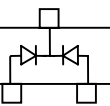
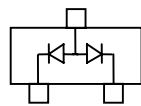


Figure 3

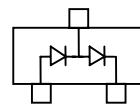


Figure 4

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel