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Micro Commercial Components

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)

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°C	P_D	200mW
Storage Temperature Range	T_{stg}	-55°C to 125°C
Junction Temperature	T_j	-55°C to 125°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
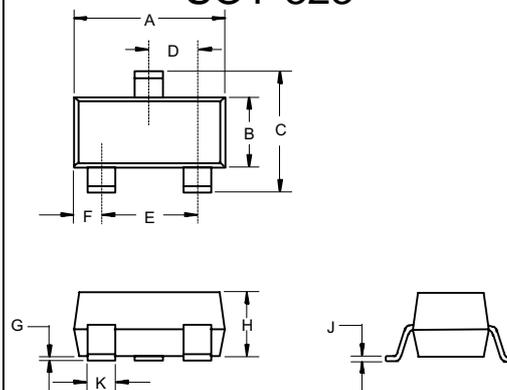
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

Suggested Solder Pad Layout

0.70
0.90
1.90
0.65
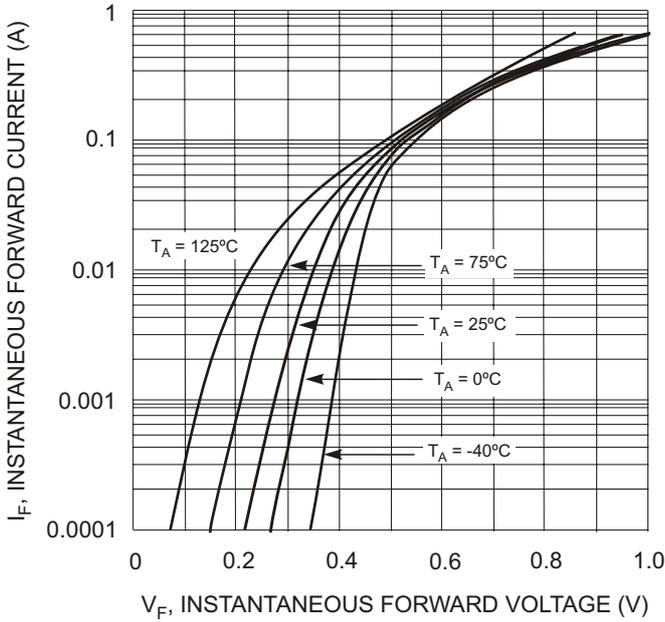0.65

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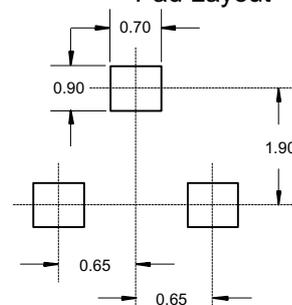
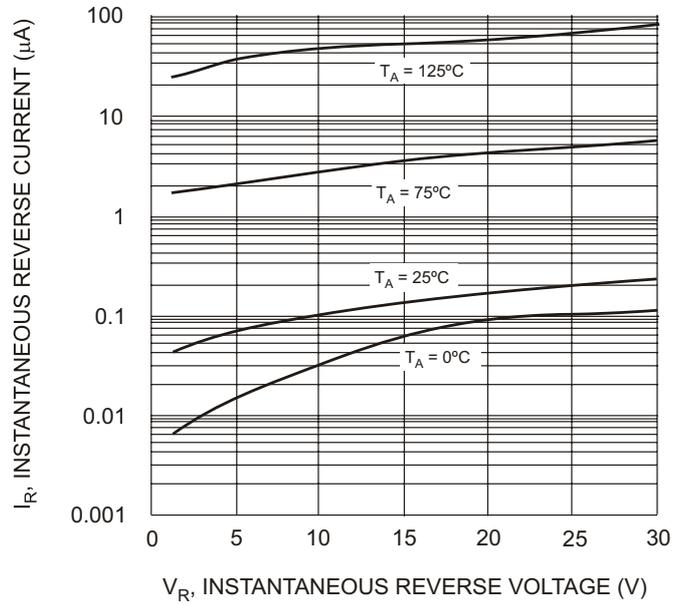# BAT54WT thru BAT54SWT

Fig. 1 Forward Characteristics

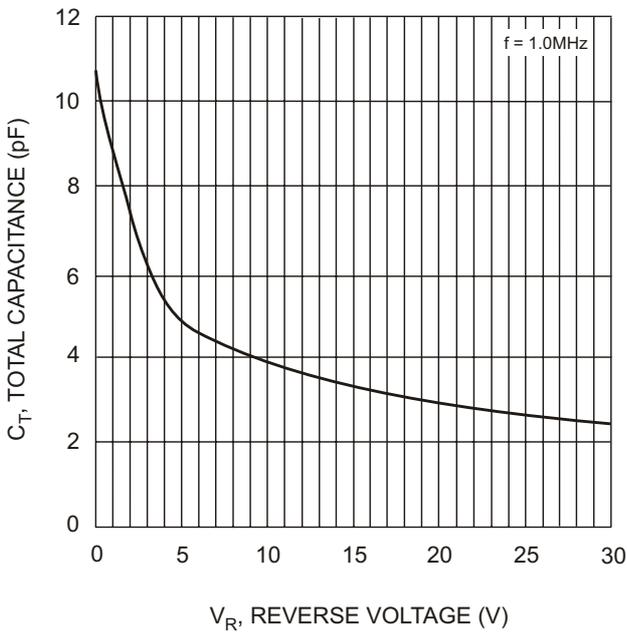Fig. 2 Typical Reverse Characteristics

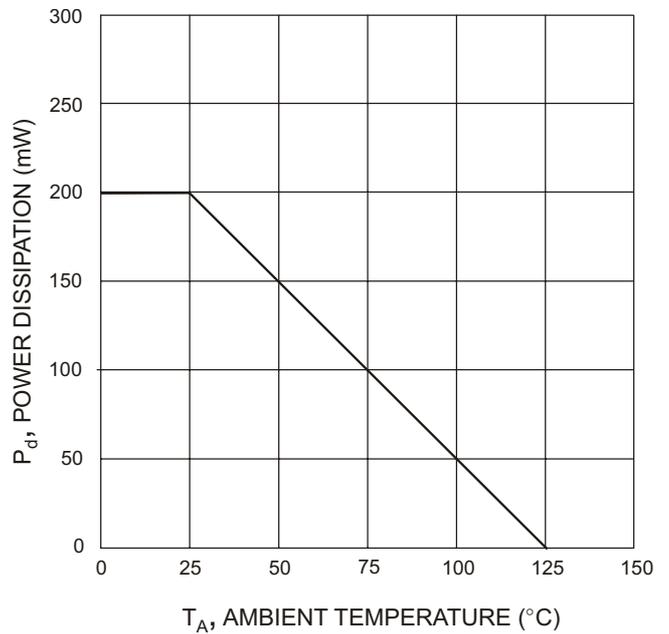Fig. 3 Typical Capacitance vs. Reverse Voltage
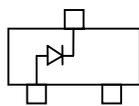

Fig. 4 Power Derating Curve

Pin Configuration - Top View

Figure 1   Figure 2   Figure 3   Figure 4
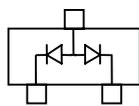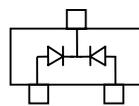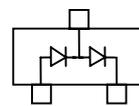
Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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