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BAT54 THRU BAT54S

Features

- Low Forward Voltage
- Surface Mount device
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Number	Device Marking		Type	Pin Configuration See page 3
	1	2		
BAT54	KL1	L4	Single	Figure 1
BAT54A	KL2	L42	Dual	Figure 2
BAT54C	KL3	L43	Dual	Figure 3
BAT54S	KL4	L44	Dual	Figure 4

200mWatt, 30Volt Schottky Barrier Diode

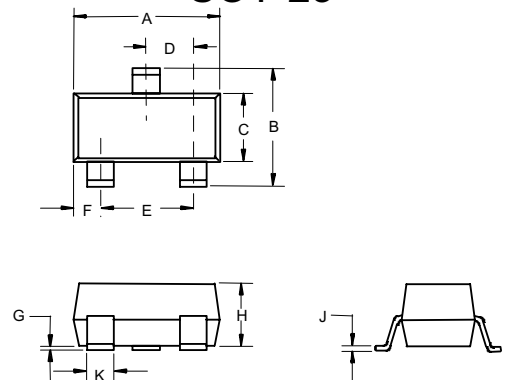
Maximum Ratings

Continous Reverse Voltage	V_R	30V
Forward ContinuousCurrent	I_F	200mA
Non-Repetitive Peak Forward Current $t < 1s$	I_{FSM}	0.6A
Total Power Dissipation @ $T_A = 25^\circ C$	P_D	200mW
Storage Temperature Range	T_{stg}	$-55^\circ C$ to $150^\circ C$
Operating Junction Temperature Range	T_j	$-55^\circ C$ to $125^\circ C$
Soldering temperature during 10s	T	$260^\circ C$

Electrical Characteristics @ 25 °C Unless Otherwise Specified

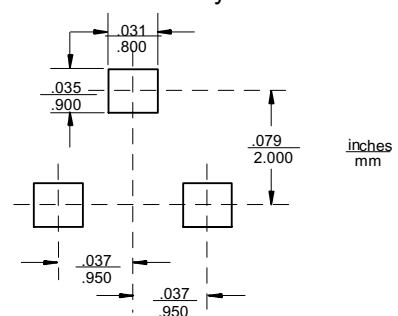
Characteristics	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	V_F	240mV 320mV 400mV 500mV 1000mV	
Reverse Current	I_R	2.0 μA	$V_R = 25V$
Capacitance	C_J	10pF	Measured at 1.0MHz, $V_R = 1.0V$
Reverse Recovery Time	t_{rr}	5nS	$I_F = I_R = 10mA$; $I_{(REC)} = 1mA$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500°C/W	

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



BAT54 thru BAT54S

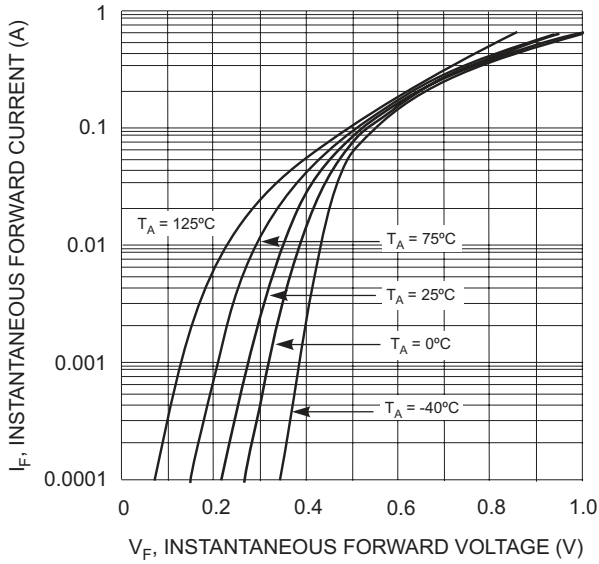


Fig. 1 Forward Characteristics

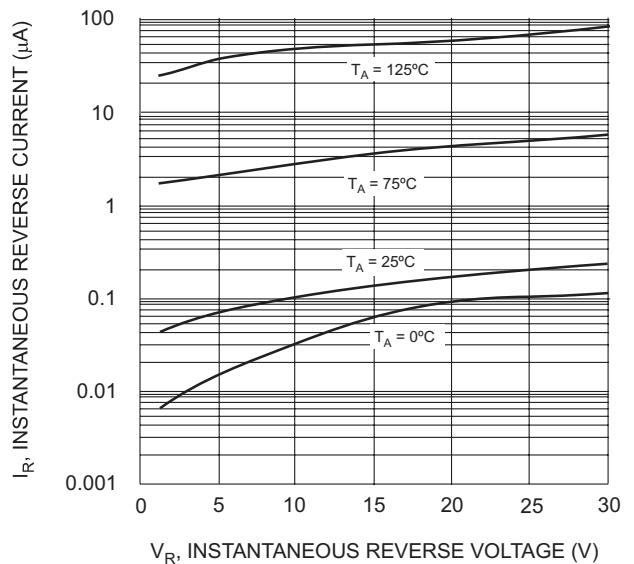


Fig. 2 Typical Reverse Characteristics

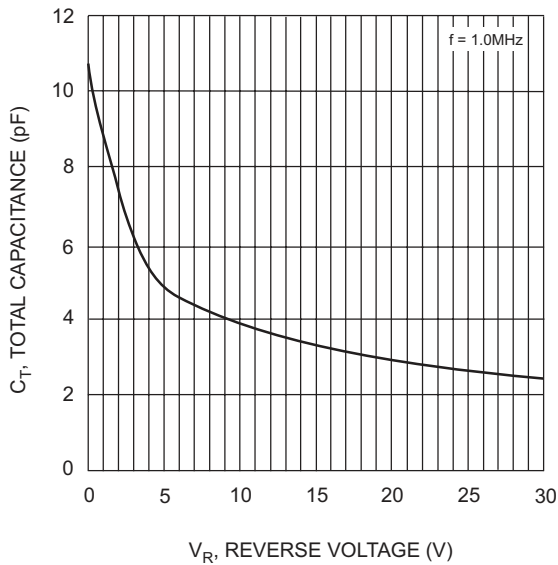


Fig. 3 Typical Capacitance vs. Reverse Voltage

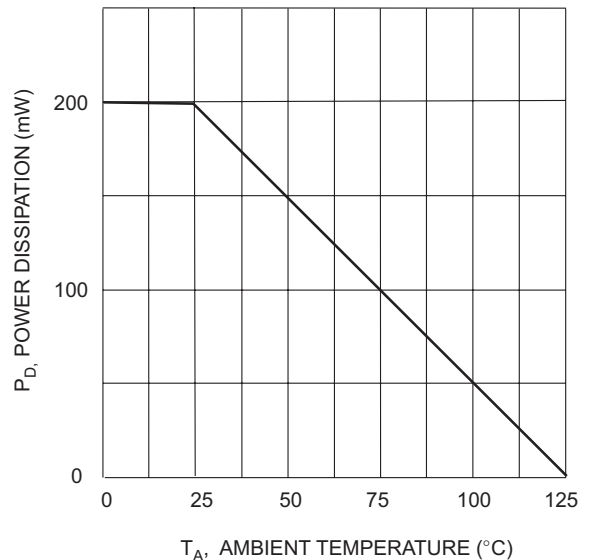


Fig. 4 Power Derating Curve

Pin Configuration - Top View

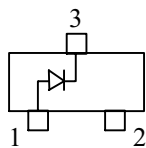


Figure 1

BAT54

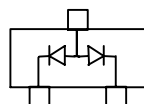


Figure 2

BAT54A

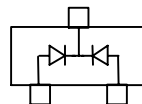


Figure 3

BAT54C

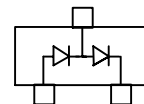


Figure 4

BAT54S