Micro Commercial Components

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BAT54
THRU
BAT54S

200mWatt, 30Volt
Schottky Barrier Diode

Features

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

MCC Catalog 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

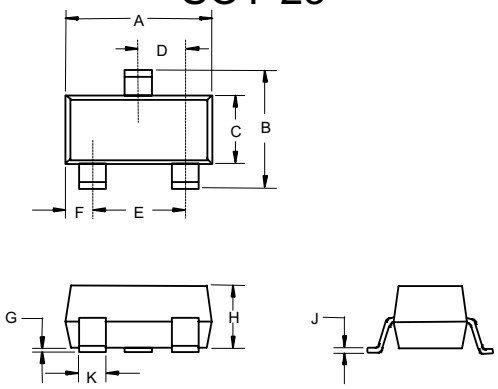
Maximum Ratings

Continuos 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°C	P_D	200mW
Storage Temperature Range	T_{stg}	-55°C to 150°C
Operating Junction Temperature Range	T_j	-55°C to 125°C
Soldering temperature during 10s	T_j	260°C

Electrical Characteristics @ 25 °C Unless Otherwise Specified

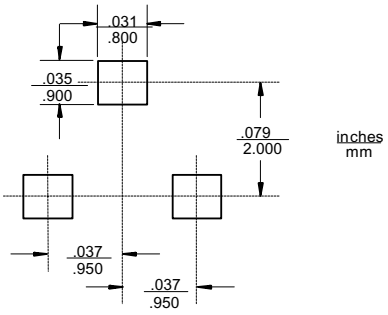
Characteristics	Symbol	Max.	Notes
Forward Voltage at I_F = 0.1mA I_F = 1mA I_F = 10mA I_F = 30mA I_F = 100mA	V_F	 240mV 320mV 400mV 500mV 1000mV	
Reverse Current	I_R	2.0 uA	V_R = 25V
Capacitance	C_J	10pF	Measured at 1.0MHz, V_R=1.0V
Reverse Recovery Time	t_{rr}	5nS	I_F=I_R=10mA; $I_{(REC)}$ = 1mA
Thermal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

SOT-23



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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



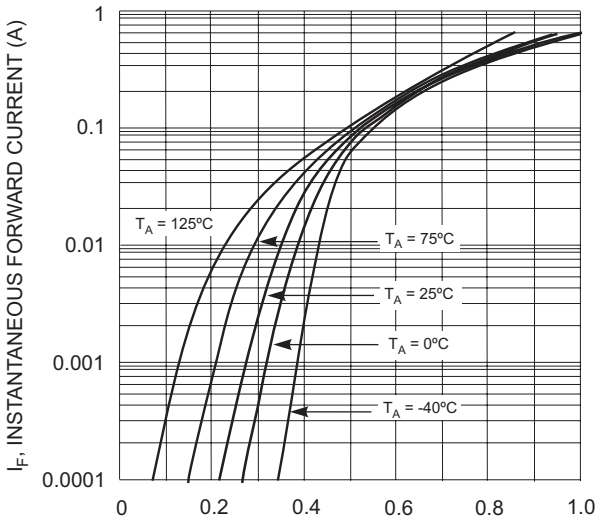


Fig. 1 Forward Characteristics

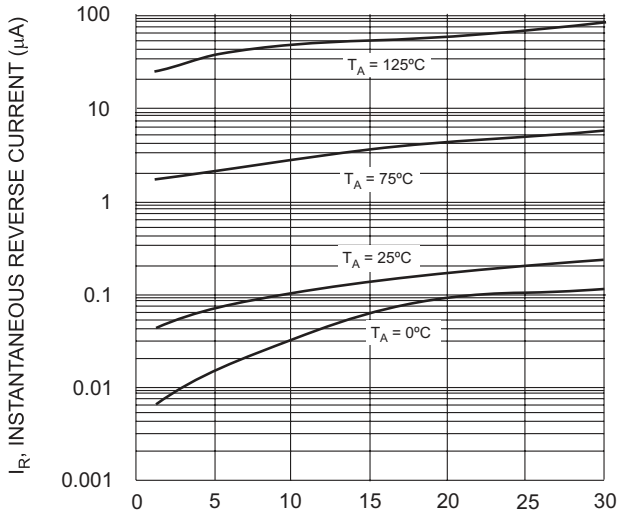


Fig. 2 Typical Reverse Characteristics

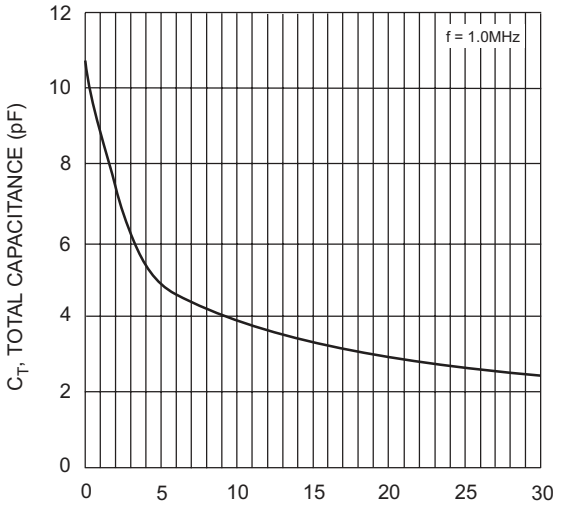


Fig. 3 Typical Capacitance vs. Reverse Voltage

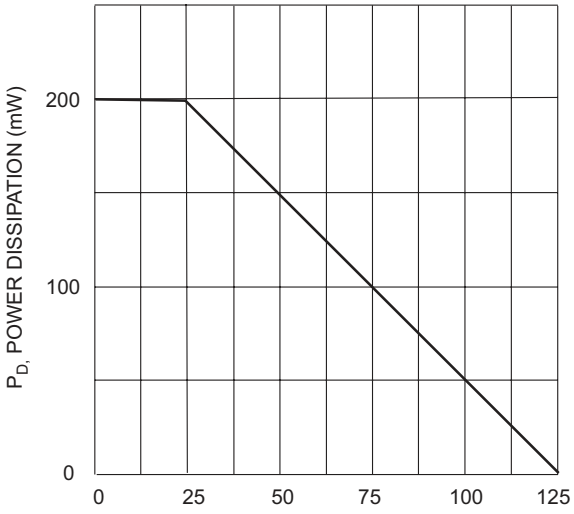


Fig. 4 Power Derating Curve

Pin Configuration - Top View

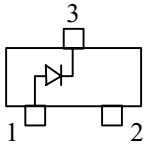


Figure 1

BAT54

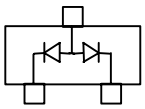


Figure 2

BAT54A

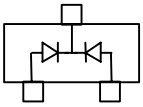


Figure 3

BAT54C

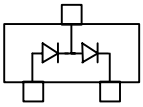


Figure 4

BAT54S

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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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