



# BAT54 THRU BAT54S

## 250mWatt, 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"

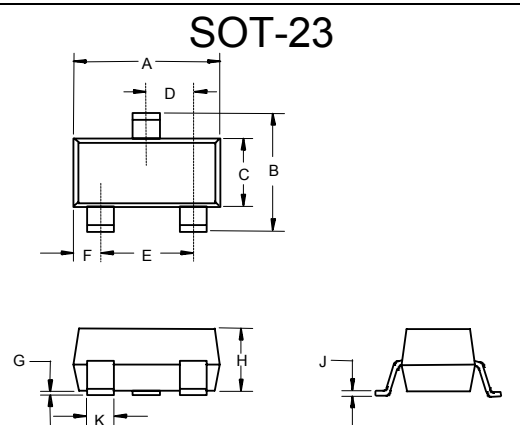
MCC Catalog Number	Device Marking		Type	Pin Configuration See page 3
	1	2		
BAT54	KL1	L4/L4P	Single	Figure 1
BAT54A	KL2	L42	Dual	Figure 2
BAT54C	KL3	L43	Dual	Figure 3
BAT54S	KL4	L44	Dual	Figure 4

### Maximum Ratings

Continuous Reverse Voltage	$V_R$	30V
Forward Continuous Current	$I_F$	200mA
Non-Repetitive Peak Forward Current $t < 1s$	$I_{FSM}$	0.6A
Total Power Dissipation @ $T_A = 25^\circ C$	$P_D$	250mW
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	$T_j$	$260^\circ C$

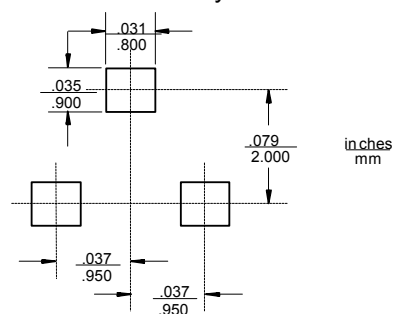
### Electrical Characteristics @ $25^\circ C$ Unless Otherwise Specified

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 800mV	
Reverse Current	$I_R$	$2.0 \mu A$	$V_R = 25V$
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	$R_{\theta JA}$	$500^\circ C/W$	



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

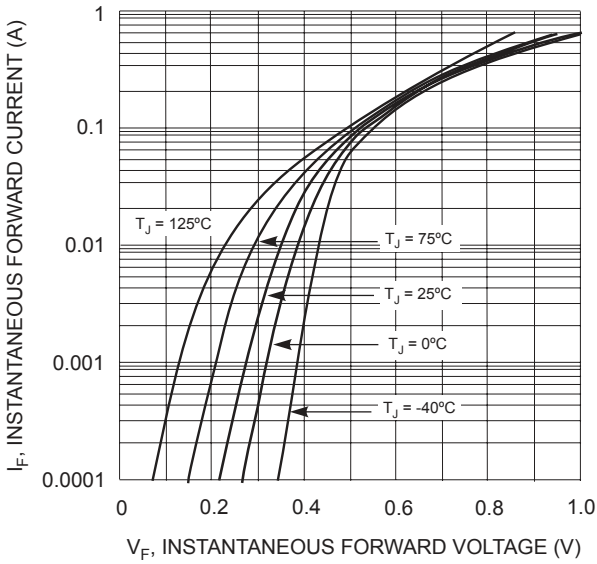


Fig. 1 Forward Characteristics

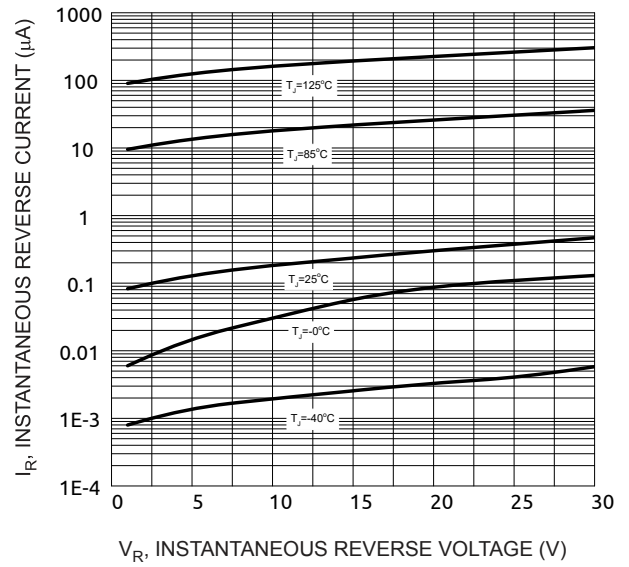


Fig. 2 Typical Reverse Characteristics

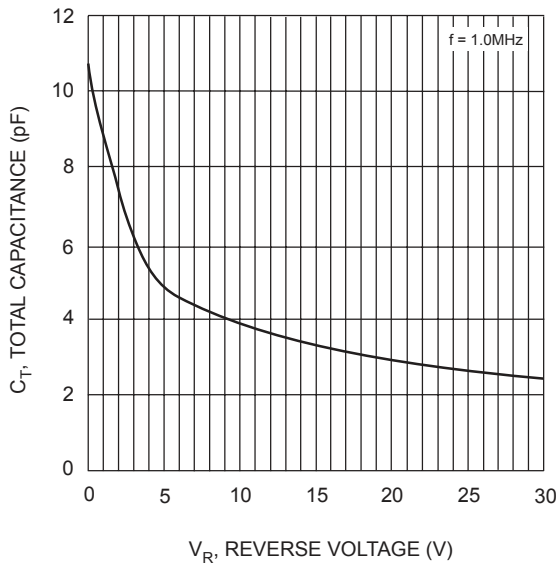


Fig. 3 Typical Capacitance vs. Reverse Voltage

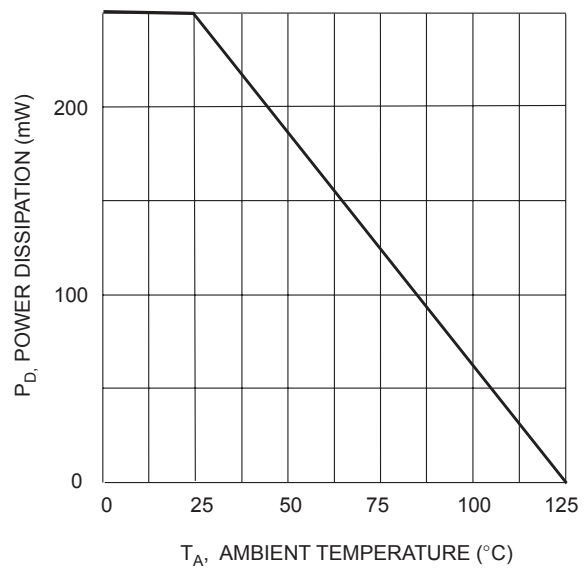


Fig. 4 Power Derating Curve

Pin Configuration - Top View

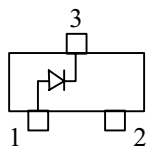


Figure 1

BAT54

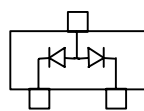


Figure 2

BAT54A

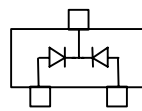


Figure 3

BAT54C

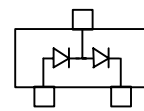


Figure 4

BAT54S



Micro Commercial Components

### Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.