

**Micro Commercial Components** 



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## **BAT54 THRU** BAT54S

### **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	Device Marking		Туре	Pin
Number	1	2	. )   0	Configuration See page 3
BAT54	KL1	L4	Single	Figure 1
BAT54A	KL2	L42	Dual	Figure 2
BAT54C	KL3	L43	Dual	Figure 3
BAT54S	KL4	L44	Dual	Figure 4

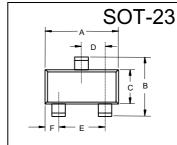
## **Maximum Ratings**

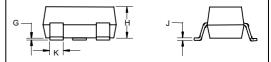
Continuos Reverse Voltage		30V
Forward ContinuousCurrent	lF	200mA
Non-Repetitive Peak Forward Current t<1s	I <sub>FSM</sub>	0.6A
Total Power Dissipation @ T <sub>A</sub> = 25°C	$P_{D}$	200mW
Storage Temperature Range	$T_{stg}$	-55°C to 150°C
Operating Junction Temperature Range	Tj	-55°C to 125°C
Soldering temperature during 10s		260°C

#### Electrical Characteristics @ 25 °C Unless Otherwise Specified

Characteristics	Symbol	Max.	Notes
Forward Voltage at			
$I_{F} = 0.1 \text{mA}$		240mV	
$I_F = 1mA$	$V_{F}$	320mV	
$I_F = 10mA$		400mV	
$I_F = 30mA$		500mV	
$I_{F} = 100 \text{mA}$		1000mV	
Reverse Current	$I_R$	2.0 uA	$V_R = 25V$
Capacitance	С	10pF	Measured at 1.0MHz, V <sub>R</sub> =1.0V
Reverse Recovery	t <sub>rr</sub>	5nS	$I_F = I_R = 10 \text{mA};$
Time			$I_{(REC)} = 1mA$
Thermal Resistance,	$R_{\scriptscriptstyle{ hetaJA}}$	500°C/W	
Junction to Ambient			

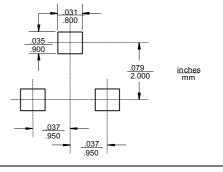
## 200mWatt, 30Volt **Schottky Barrier Diode**





DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.110	.120	2.80	3.04	
В	.083	.104	2.10	2.64	
С	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
Е	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
Ð	.0005	.0039	.013	.100	
I	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

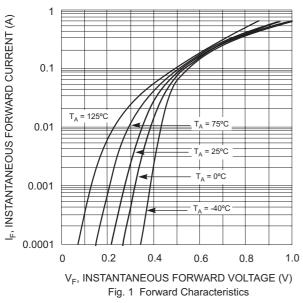
#### Suggested Solder Pad Layout

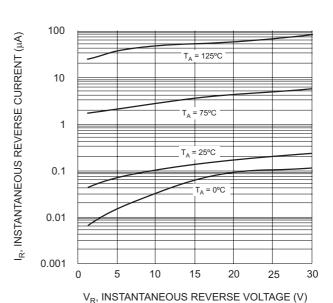


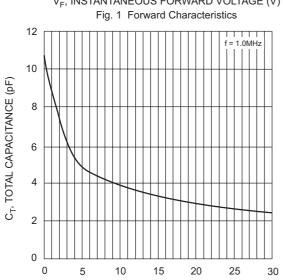
## BAT54 thru BAT54S



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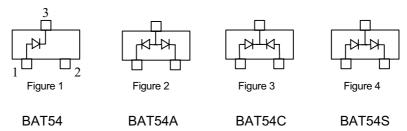




 ${\rm V_R,\,REVERSE\,\,VOLTAGE\,\,(V)}$  Fig. 3 Typical Capacitance vs. Reverse Voltage

T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve

#### Pin Configuration - Top View





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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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