

# Micro Commercial Components Corp.

Complete Discrete Semiconductor Solutions

Part Number	BAT54		
product family	SMALL SIGNAL SCHOTTKY DIODES		
package type	SOT-23	SOT-23	
VRM(PRV)	30V	30V	
Ifsm	1.0mA		
IF(AV)	200mA		
@Vf	400mV		
@If	10mA		
Trr	5.0nS		
IR	2.0µA	2.0μΑ	
@VR	30V	30V	
Package Qty	Tape: 3K/Reel, 120K/Ctn;	Tape: 3K/Reel, 120K/Ctn;	

This product is listed under the following categories where you may find similar products: Diodes

Small Signal Schottky Diodes



## BAT54 THRU BAT54S

## **Features**

- Low Forward Voltage
- Surface Mount device
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

MCC Catalog	Device Marking		Type	Pin
Number	1	2	1,750	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

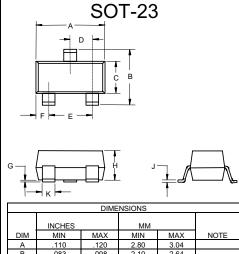
## **Maximum Ratings**

Continuos Reverse Voltage	$V_R$	30V
Forward ContinuousCurrent		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		-55°C to 150°C
Operating Junction Temperature Range	Ti	-55°C to 125°C
Soldering temperature during 10s		260°C

### Electrical Characteristics @ 25 $^{\circ}$ 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	$V_{R} = 25V$
0 ''	0	40.5	NA
Capacitance	CJ	10pF	Measured at
			1.0MHz, V <sub>R</sub> =1.0V
Reverse Recovery	t <sub>rr</sub>	5nS	$I_F=I_R=10mA$ ;
Time			$I_{(REC)} = 1mA$
Thermal Resistance,	$R_{\theta JA}$	500°C/W	
Junction to Ambient			

## 200mWatt, 30Volt Schottky Barrier Diode



BINIENCIONO					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.110	.120	2.80	3.04	
В	.083	.098	2.10	2.64	
С	.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	
Н	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

# 



## **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

#### \*\*\*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.

#### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.