



Micro Commercial Components



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# BAT54T THRU BAT54ST

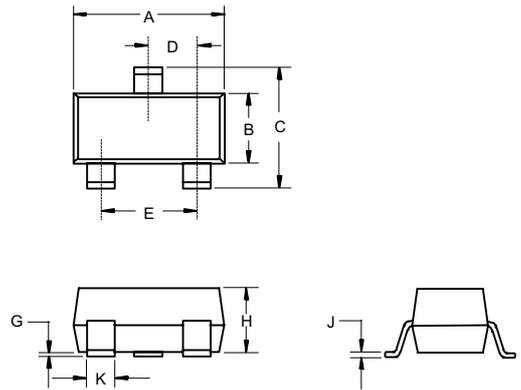
## Features

- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Halogen free available upon request by adding suffix "-HF"
- PN Junction Guard Ring for Transient and ESD Protection
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

MCC Part Number	Device Marking	Type	Pin Configuration
BAT54T	L1	Single	Figure 1
BAT54AT	L2	Dual	Figure 2
BAT54CT	L3	Dual	Figure 3
BAT54ST	L4	Dual	Figure 4

## 150mWatt, 30Volt Schottky Barrier Diode

### SOT-523



## Maximum Ratings

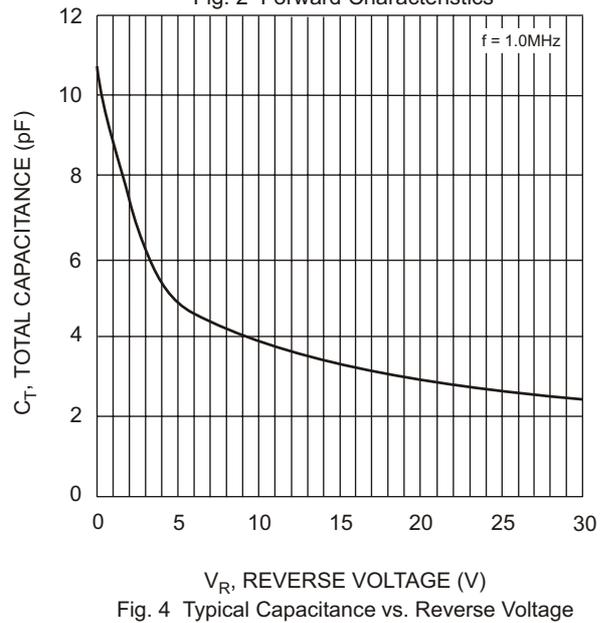
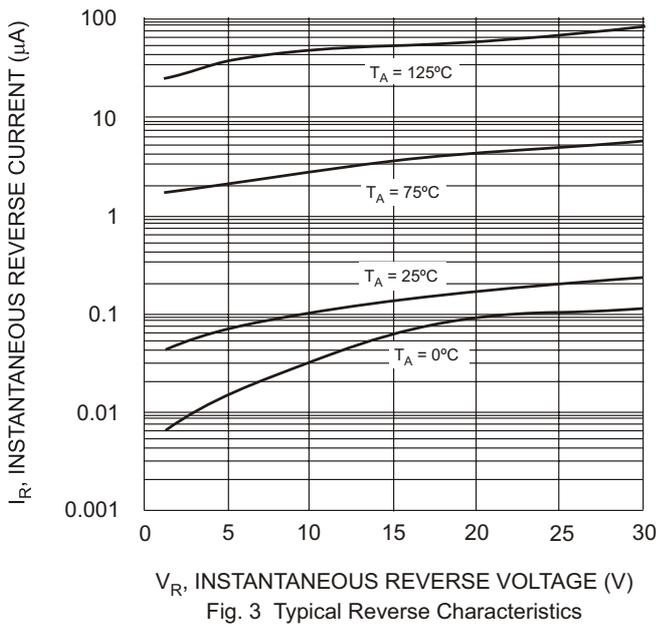
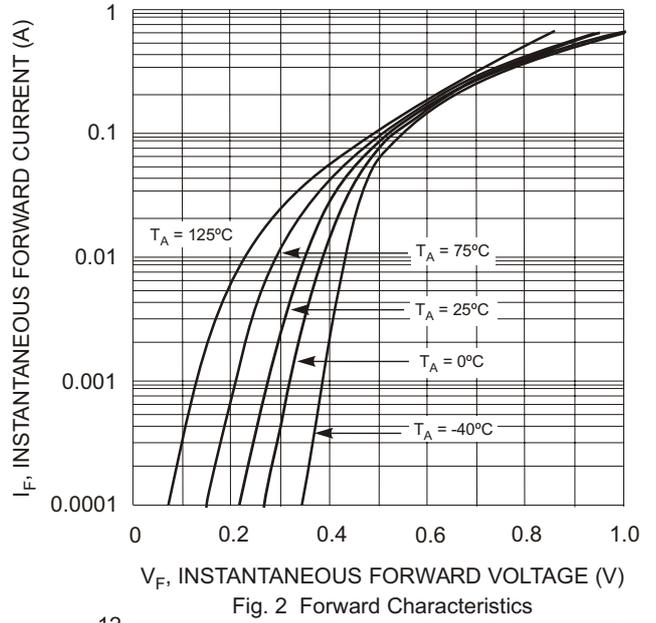
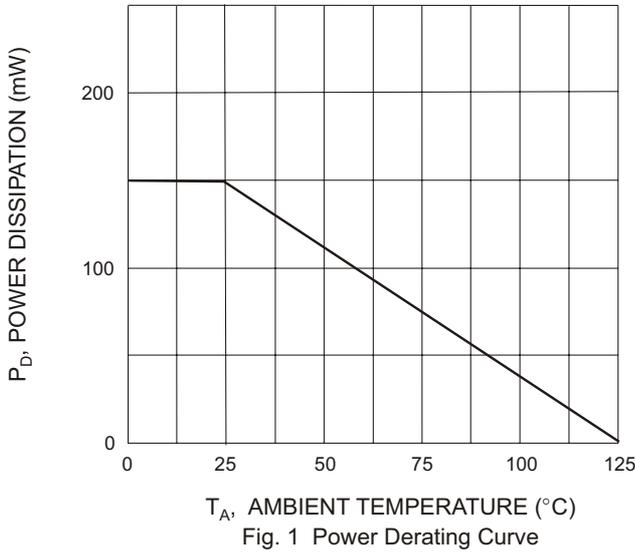
DC Blocking Voltage	$V_R$	30V
Average Rectified Output Current	$I_O$	200mA
Repetitive Peak Forward Current	$I_{FRM}$	300mA
Non-Repetitive Peak Forward Current $t < 1s$	$I_{FSM}$	600mA
Total Power Dissipation @ $T_A = 25^\circ C$	$P_D$	150mW
Storage Temperature Range	$T_{stg}$	$-65^\circ C$ to $125^\circ C$
Junction Temperature	$T_j$	$-65^\circ C$ to $125^\circ C$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667°C/W

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Ratings	Symbol	Max.	Notes
Forward Voltage	$V_F$	240mV 320mV 400mV 500mV 1000mV	$I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$
Reverse Current	$I_R$	2μA	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	$I_R = 100uA$
Total Capacitance	$C_T$	10pF	Measured at 1.0MHz, $V_R = 1.0V$
Reverse Recovery Time	$t_{rr}$	5nS	$I_F = 10mA$ ; $I_R = 10mA \sim 1.0mA$ , $R_L = 100 \Omega$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50 Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.006	.014	.15	.35	

BAT54T thru BAT54ST



Pin Configuration - Top View

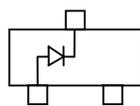


Figure 1

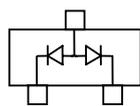


Figure 2

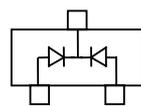


Figure 3

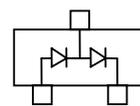


Figure 4



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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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