



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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## **BAT54WT** thru **BAT54SWT**

## 200mWatt, 30Volt

# **Schottky Barrier Diode**

## Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount SOT-323 Package
- Capable of 200mWatts of Power Dissipation
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

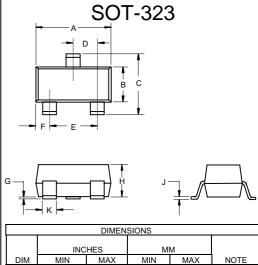
Part Number	Device Marking	Туре	Pin Configuration
BAT54WT	KL5	Single	Figure 1
BAT54AWT	KL6	Dual	Figure 2
BAT54CWT	KL7	Dual	Figure 3
BAT54SWT	KL8	Dual	Figure 4

## **Maximum Ratings**

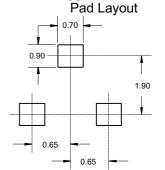
Continuous Reverse Voltage		30V
Forward Current	lF	200mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	300mA
Non-Repetitive Peak Forward Current t<1s	I <sub>FSM</sub>	600mA
Total Power Dissipation @ T <sub>A</sub> = 25°C	$P_{D}$	200mW
Storage Temperature Range	T <sub>stg</sub>	-55°C to 125°C
Junction Temperature		-55°C to 125°C

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

Ratings	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 μΑ	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	
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,	$R_{\scriptscriptstyle{ hetaJA}}$	500K/W	
Junction to Ambient			



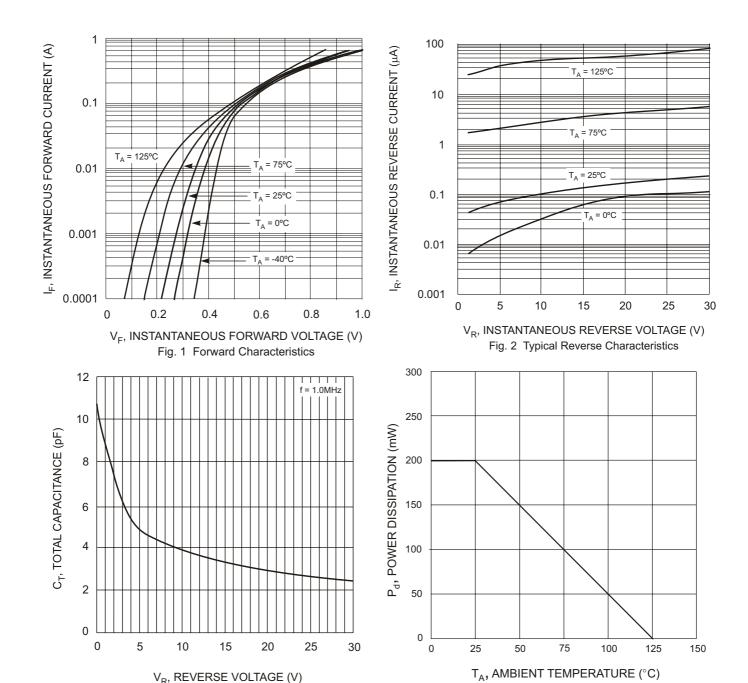
DIIVI	IVIIIV	IVIAX	IVIIIN	IVIAA	NOIL
Α	.071	.087	1.80	2.20	
В	.045	.053	1.15	1.35	
С	.083	.096	2.10	2.45	
D	.026 N	ominal	0.65Nom	inal	
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
Н	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	
Suggested Solder Pad Layout					
0.70					



## BAT54WT thru BAT54SWT



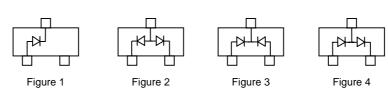
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Pin Configuration - Top View

Fig. 3 Typical Capacitance vs. Reverse Voltage

Fig. 4 Power Derating Curve





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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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