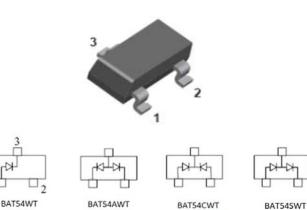
## **BAT54WT THRU BAT54SWT**

# **Schottky Barrier Diode**



#### Features

- •Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount device

#### **Mechanical Data**

- Package: SOT-323
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:

BAT54WT	KL5
BAT54AWT	KL6
BAT54CWT	KL7
BAT54SWT	KL8

#### ■Maximum Ratings(Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Value	
Continuous Reverse Voltage	V <sub>R</sub>	v	30	
Forward Continuous Current	IF	mA	200	
Non-Repetitive Peak Forward Surge Current @ t<1s	I <sub>FSM</sub>	А	0.6	
Total Power Dissipation @ T <sub>A</sub> =25℃	P <sub>D</sub>	mW	200	
Thermal Resistance, Junction to Ambient	R <sub>thJA</sub>	°C/W	500	
Operation Junction Temperature	TJ	°C	-55 to +125	
Storage Temperature	T <sub>STG</sub>	Ĉ	-55 to +125	

### Ordering Information (Example)

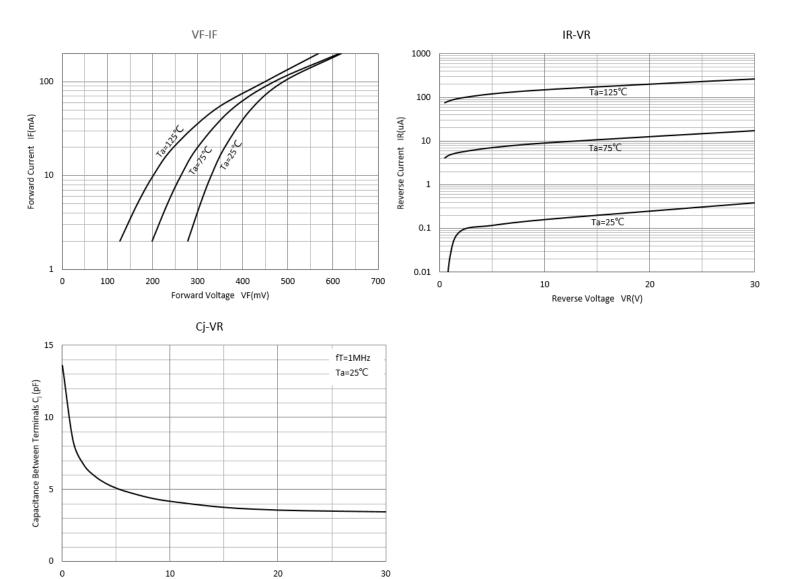
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54WT	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT54AWT	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT54CWT	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT54SWT	F2	Approximate 0.005	3000	30000	120000	7" reel

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### ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

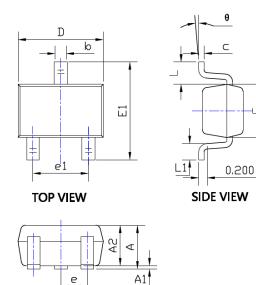
Item	Symbol	Unit	Conditions	Value
Maximum Instantaneous Forward Voltage	VF	V	I <sub>FM</sub> =0.1mA	0.24
			I <sub>FM</sub> =1mA	0.32
			I <sub>FM</sub> =10mA	0.4
			I <sub>FM</sub> =30mA	0.5
			I <sub>FM</sub> =100mA	1
Maximum DC Reverse Current	I <sub>R</sub>	uA	V <sub>R</sub> =25V	2
Typical Junction Capacitance	CJ	pF	f=1.0MHz, V <sub>R</sub> =1.0V	10
Maximum Reverse Recovery Time	T <sub>rr</sub>	ns	$I_{F}=I_{R}=10mA$ $I_{rr}=0.1^{*}I_{R}, R_{L}=100\Omega$	5

### Typical Characteristics



Reverse Voltage VR(V)

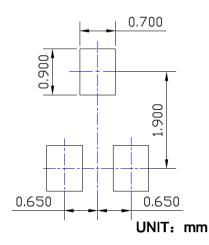
### SOT-323 Package Outline Dimensions



SYMBOL	INU	HF2	Millimeter			
	MIN.	MAX.	MIN.	MAX.		
А	0.035	0.043	0.900	1.100		
A1	0.000	0.004	0.000	0.100		
A2	0.035	0.039	0.900	1.000		
b	0.006	0.016	0.150	0.400		
С	0.004	0.010	0.100	0.250		
D	0.071	0.087	1.800	2.200		
E	0.045	0.053	1.150	1.350		
E1	0.085	0.096	2.150	2.450		
e	0.026	5TYP	0.650TYP			
e1	0.047	0.055	1.200	1.400		
L	0.021	REF	0.525REF			
L1	0.010	0.018	0.260	0.460		
θ	0°	8*	0°	8*		

SIDE VIEW

SOT-323 Suggested Pad Layout





## **BAT54WT THRU BAT54SWT**

#### Disclaimer

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