

BAT54WS SURFACE MOUNT SCHOTTKY BARRIER DIODE

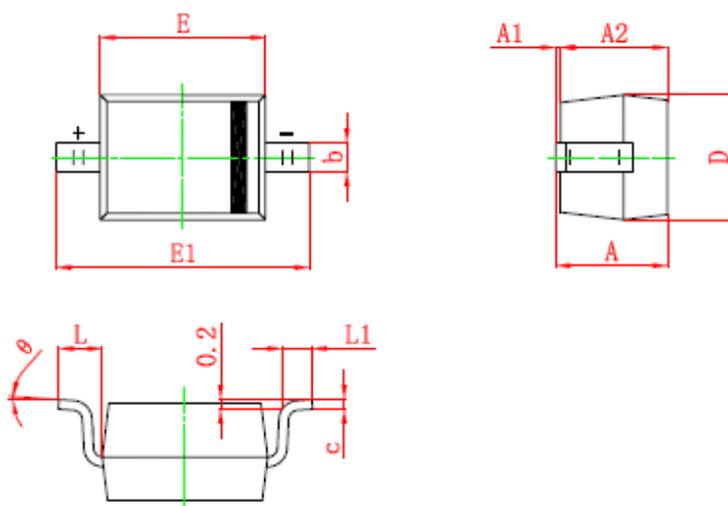
Features:

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material —UL Recognition Flammability Classification 94V-0
- Green Products in Compliance with the ROHS Directive
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams(approx)

Mechanical Dimensions: In mm / Inches

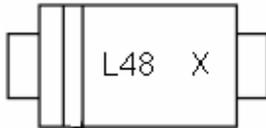


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°		8°	

SOD-323(CJ)



Marking Diagram:



Where X is Date Code

L48 = Part Name

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
BAT54WS	SOD-323(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current (Note 1)	I_F	200	mA
Repetitive Peak Forward Current (Note 1)	I_{FRM}	300	mA
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	I_{FSM}	600	mA
Power Dissipation (Note 1)	P_d	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage @ $I_{RS} = 100\mu\text{A}$	$V_{(BR)R}$	30	-	-	V
Forward Voltage (Note 2) @ $I_F = 1.0\text{mA}$ @ $I_F = 100\text{mA}$	V_F	-	-	0.32 1.0	V
Reverse Leakage Current (Note 2) @ $V_R = 25\text{V}$	I_R	-	-	2.0	μA
Typical Junction Capacitance ($V_R = 1.0\text{V}$, $f = 1.0\text{MHz}$)	C_j	-	-	10	pF
Reverse Recovery Time (Note 3)	t_{rr}	-	-	5.0	nS

Note: 1. Valid provided that terminals are kept at ambient temperature.
2. $t < 300\mu\text{s}$, duty cycle $< 2\%$.
3. $I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $R_L = 100\Omega$



ORDERING INFORMATION

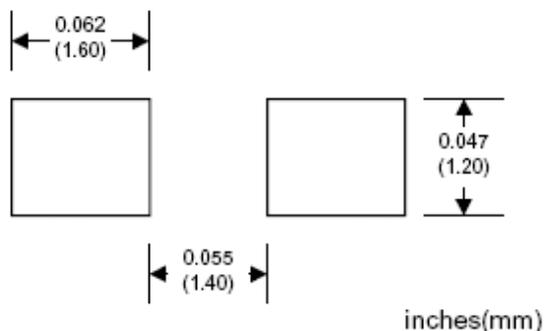
Product No.♦	Package Type	Shipping Quantity
BAT54WS-T1	SOD-323	5000/Tape & Reel
BAT54WS-T3	SOD-323	10000/Tape & Reel

Products listed in **bold** are Sensitron Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT





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