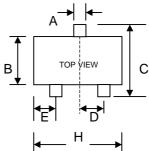


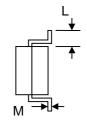
BAT54W / AW / CW / SW

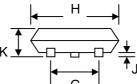
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and **ESD Protection**
- Designed for Surface Mount Application
- Plastic Material UL Recognition Flammability Classification 94V-O







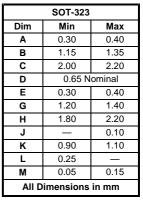
Mechanical Data

Case: SOT-323, Molded Plastic

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: See Diagrams Below Weight: 0.006 grams (approx.)

Mounting Position: Any











BAT54W Marking: L4

BAT54AW Marking: L42

BAT54CW Marking: L43 BAT54SW Marking: L44

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	30	V
Forward Continuous Current (Note 1)	lF	200	mA
Repetitive Peak Forward Current (Note 1)	IFRM	300	mA
Forward Surge Current (Note 1) @ t < 1.0s	IFSM	600	mA
Power Dissipation (Note 1)	Pd	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{ heta}JA$	625	K/W
Operating and Storage Temperature Range	Tj, Tstg	-55 to +125	°C

Note: 1. Devices are on fiberglass substrate and kept at ambient temperature.

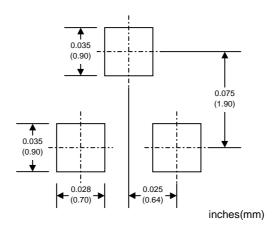
Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage	V(BR)R	30	_		V	@ I _{RS} = 100μA
Forward Voltage	VF	-	_	240 320 400 500 1000	mV	$\begin{array}{l} t_{P} < 300 \mu s, \ duty \ cycle < 2\% \\ @ \ I_{F} = 0.1 mA \\ @ \ I_{F} = 1 mA \\ @ \ I_{F} = 10 mA \\ @ \ I_{F} = 30 mA \\ @ \ I_{F} = 100 mA \end{array}$
Reverse Leakage Current	IR	_	_	2.0	μΑ	$t_P < 300\mu s$, duty cycle < 2% @ $V_R = 25V$
Junction Capacitance	Cj	_	_	10	pF	V _R = 1.0V, f = 1.0MHz
Reverse Recovery Time	trr	_	_	5.0	nS	I_F = 10mA through I_R = 10mA to I_R = 1.0mA, R_L = 100 Ω

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
BAT54W-T1	SOT-323	3000/Tape & Reel
BAT54W-T3	SOT-323	10000/Tape & Reel
BAT54AW-T1	SOT-323	3000/Tape & Reel
BAT54AW-T3	SOT-323	10000/Tape & Reel
BAT54CW-T1	SOT-323	3000/Tape & Reel
BAT54CW-T3	SOT-323	10000/Tape & Reel
BAT54SW-T1	SOT-323	3000/Tape & Reel
BAT54SW-T3	SOT-323	10000/Tape & Reel

RECOMMENDED FOOTPRINT



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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Products listed in **bold** are WTE **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.