

# Surface Mount Schottky Diode



## BAT54W Series

Voltage: 30 Volts  
Current: 200mA

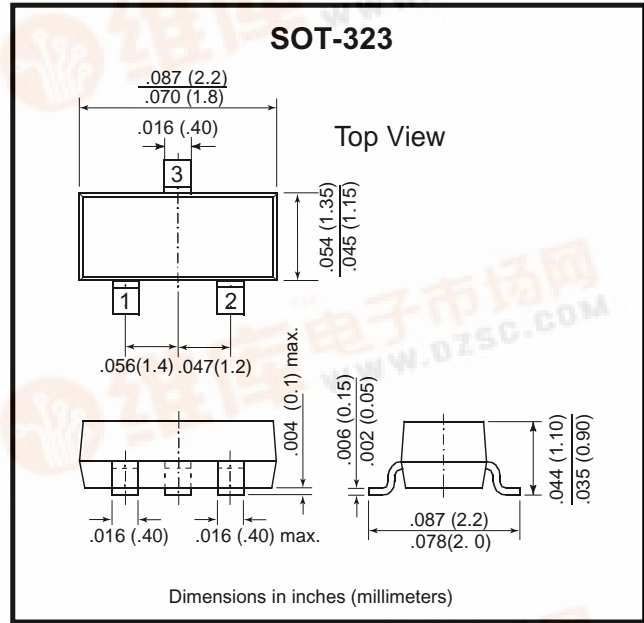
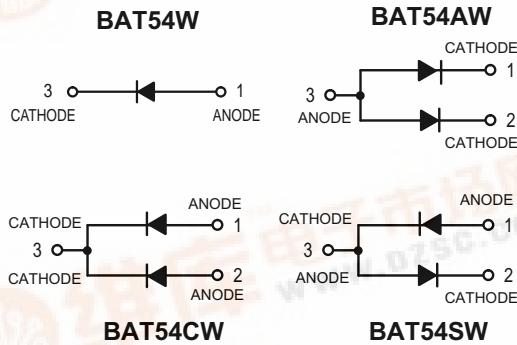


### Features

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.

### Mechanical data

Case: SOT- 323, Plastic  
Terminals: Solderable per MIL-STD-202, Method 208  
Approx. Weight: 0.008 gram



## Maximum Ratings and Electrical Characteristics

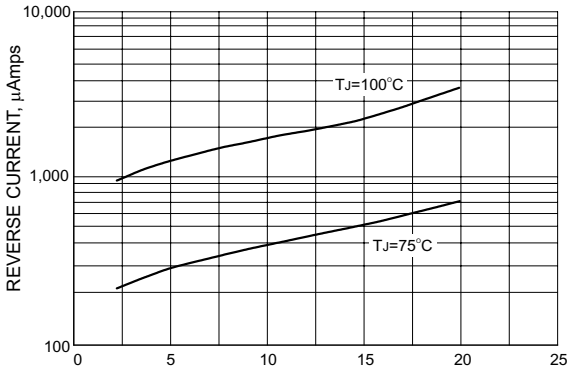
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54W	BAT54AW	BAT54CW	BAT54SW	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$			30		V
Maximum Average Forward Current at $T_a=25^\circ\text{C}$	$I_O$			0.2		A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$			0.6		A
Maximum Instantaneous Forward Voltage	$V_F$			0.32 @ $I_F=0.001\text{A}$ 1.0 @ $I_F=0.1\text{A}$		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$			0.002 @ $V_R=25\text{V}$		mA
Thermal Resistance, Junction to Ambient Air	$R_{\theta AJ}$			635		$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$			-55 TO +125		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$			-55 TO +125		$^\circ\text{C}$



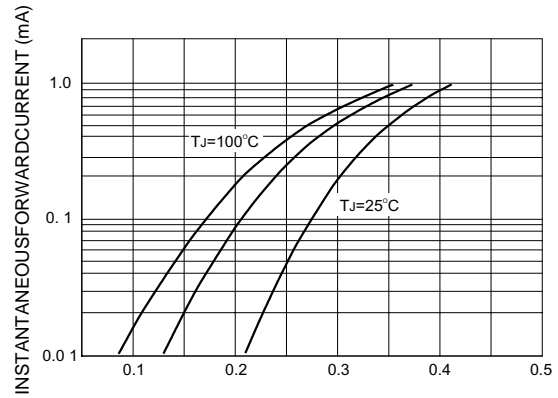
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## RATING AND CHARACTERISTIC CURVES (BAT54W Series)



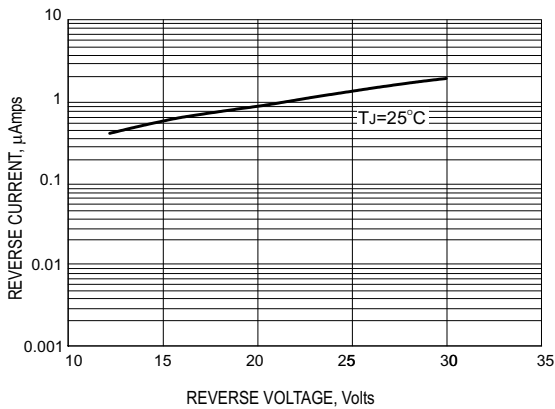
REVERSE VOLTAGE, Volts

TYPICAL REVERSE CURRENT



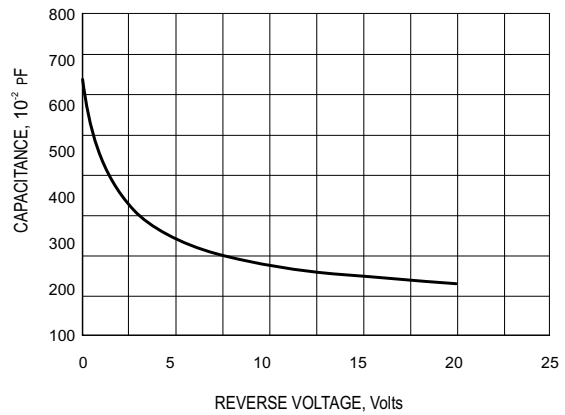
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

TYPICAL FORWARD VOLTAGE



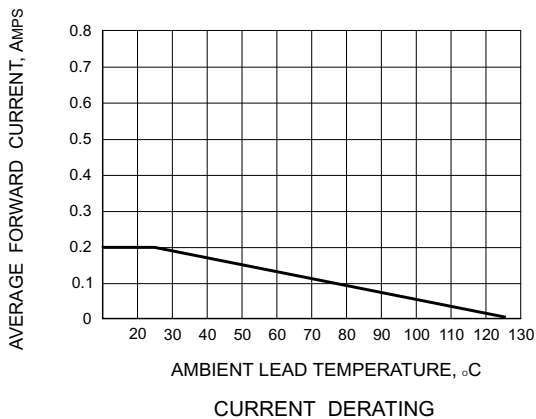
REVERSE VOLTAGE, Volts

TYPICAL REVERSE CURRENT



REVERSE VOLTAGE, Volts

TYPICAL JUNCTION CAPACITANCE



AMBIENT LEAD TEMPERATURE, °C

CURRENT DERATING