

BAT54W Series

Voltage: 30 Volts
Current: 200mA

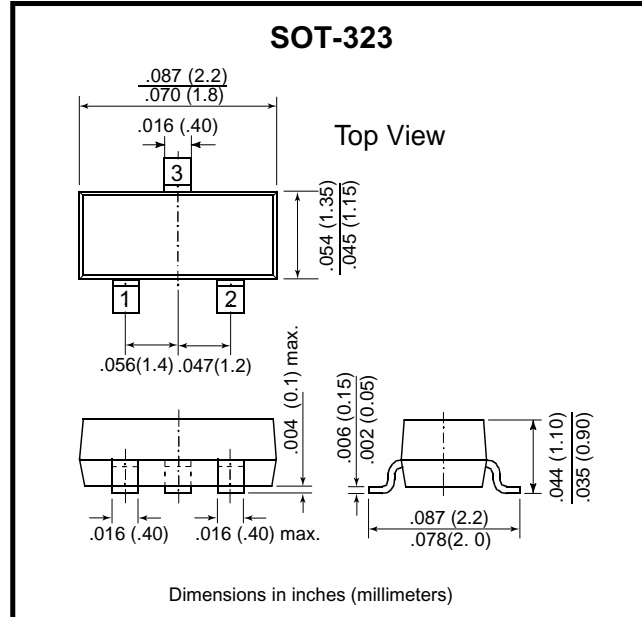
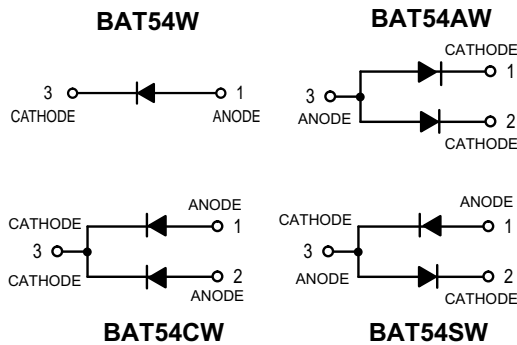


Features

- 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

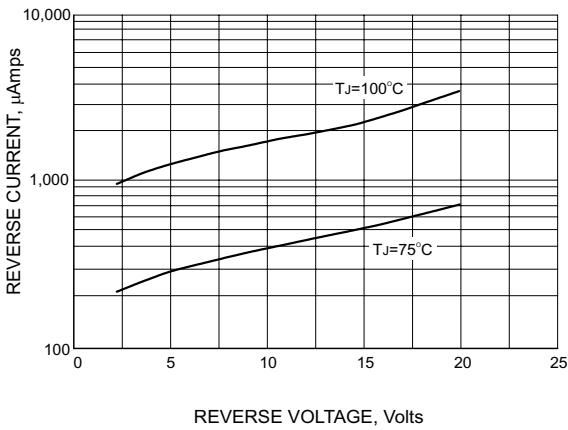


Maximum Ratings and Electrical Characteristics

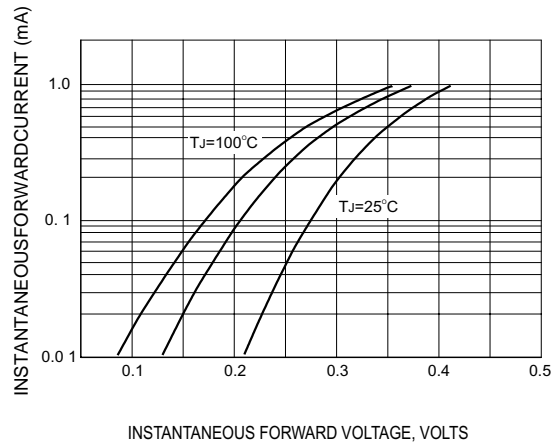
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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		$^\circ\text{C}$

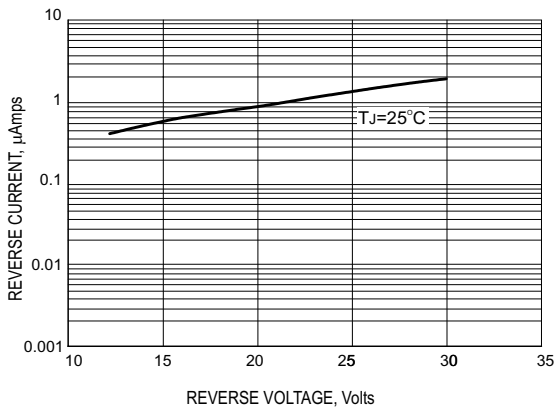
RATING AND CHARACTERISTIC CURVES (BAT54W Series)



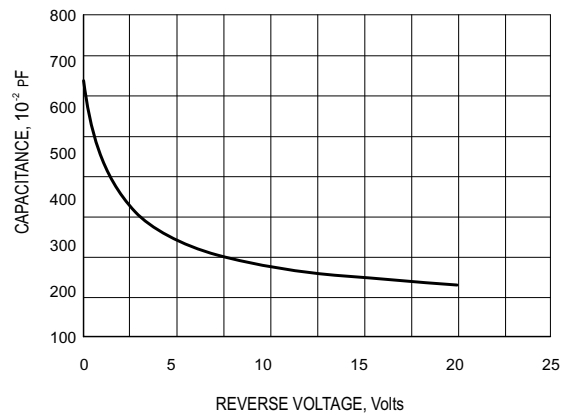
TYPICAL REVERSE CURRENT



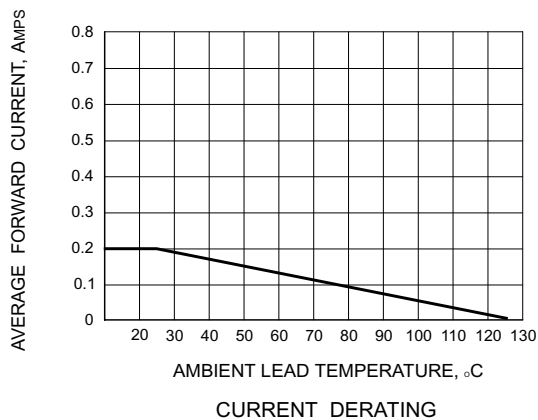
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING