

BAT54W, BAT54AW, BAT54CW, BAT54SW

SURFACE MOUNT SCHOTTKY BARRIER

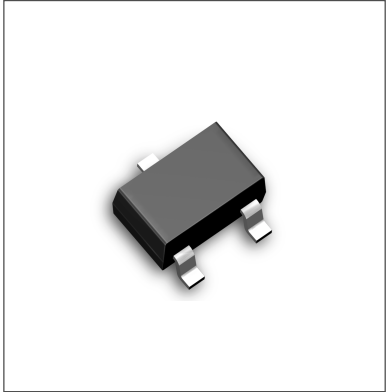
VOLTAGE	30 Volts	CURRENT	0.2 Amperes	PACKAGE	SOT-323
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FEATURES

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

MECHANICAL DATA

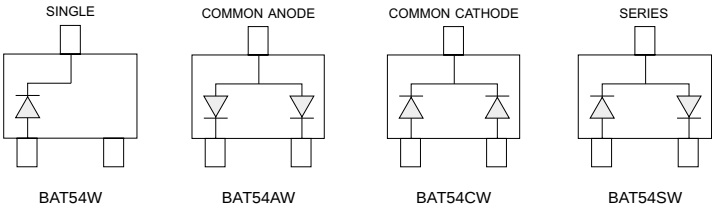
Case: SOT-323, Plastic
Terminals: Solderable per MIL-STD-202, Method 208
Approx. Weight: 0.008 gram
Marking: S41, L42, S43, L44



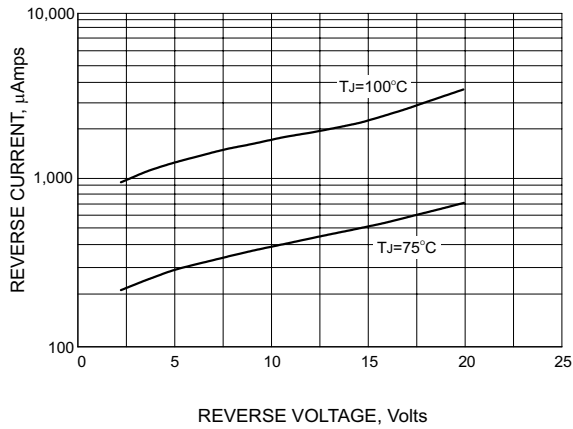
MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

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%.

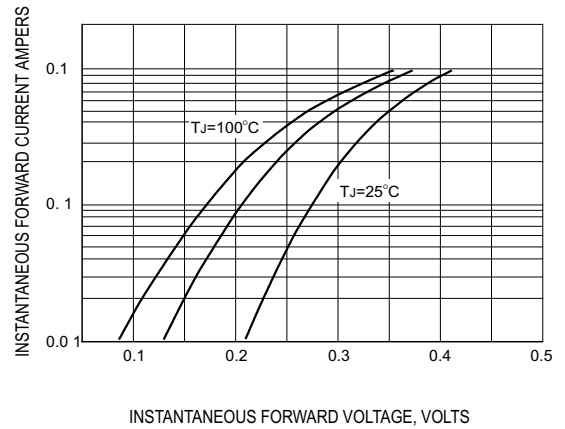
Parameter	Symbol	BAT54W	BAT54AW	BAT54CW	BAT54SW	Units
Peak Repetitive Reverse Voltage	V_{RRM}	30	30	30	30	V
Maximum Average Forward Current at $T_a=25^{\circ}\text{C}$	I_O	0.2	0.2	0.2	0.2	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	0.6	0.6	0.6	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	$R_{\theta JA}$	635				$^{\circ}\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 TO +125				$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 TO +125				$^{\circ}\text{C}$



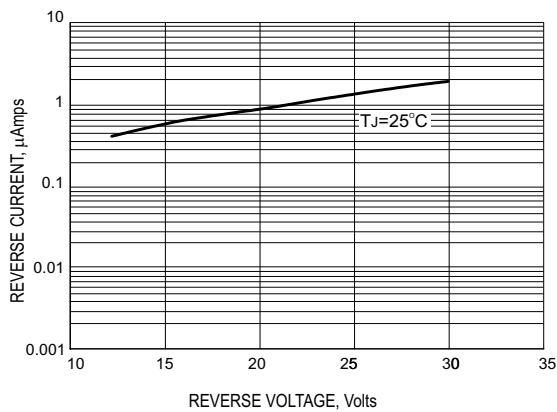
RATING and CHARACTERISTIC CURVES



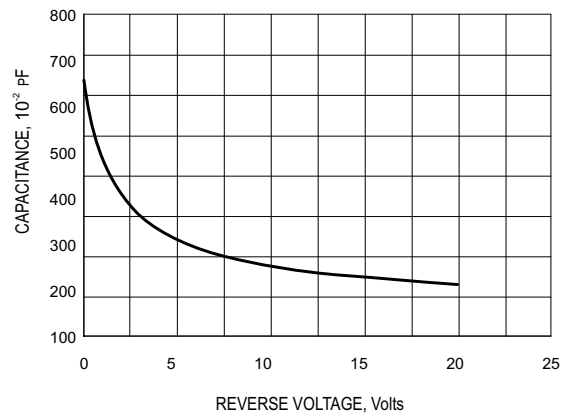
TYPICAL REVERSE CURRENT



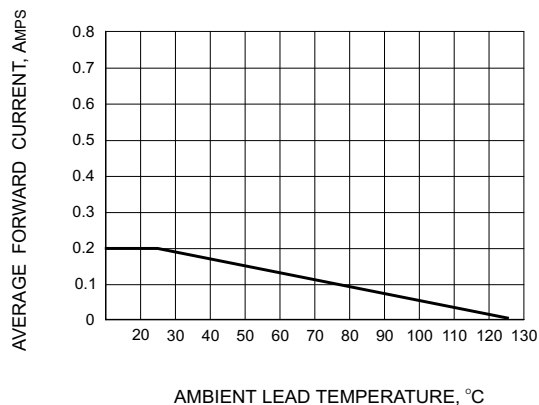
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING

OUTLINE DRAWING

SOT-323

