

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 30 Volts

**CURRENT** 0.2 Ampers

**PACKAGE** SOT-323

### FEATURES

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

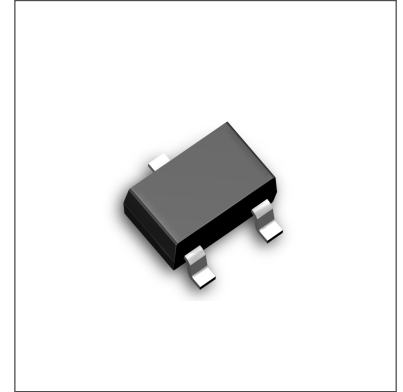
### MECHANICAL DATA

Case: SOT-323, Plastic

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

Approx. Weight: 0.008 gram

Marking: L4, L42, L43, L44



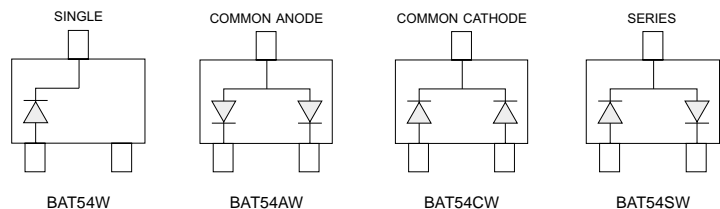
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

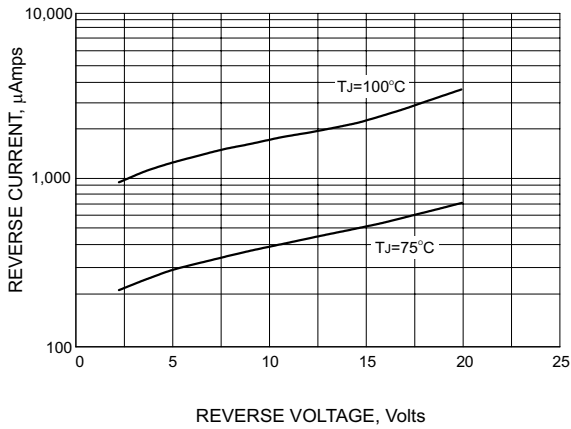
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

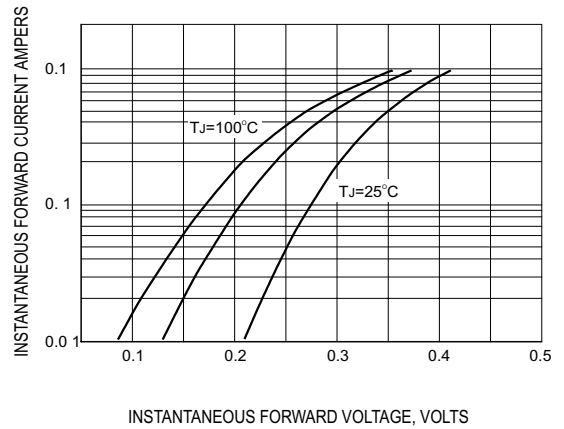
For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54W	BAT54AW	BAT54CW	BAT54SW	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	30	30	30	V
Maximum Average Forward Current at Ta=25°C	I <sub>O</sub>	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 <sub>FSM</sub>	0.6	0.6	0.6	0.6	A
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.32 @ I <sub>F</sub> =0.001A 1.0 @ I <sub>F</sub> =0.1A				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.002 @ V <sub>R</sub> =25V				mA
Thermal Resistance, Junction to Ambient Air	R <sub>θJA</sub>	635				°C / W
Operating Junction Temperature Range	T <sub>J</sub>	-55 TO +125				°C
Storage Temperature Range	T <sub>STG</sub>	-55 TO +125				°C

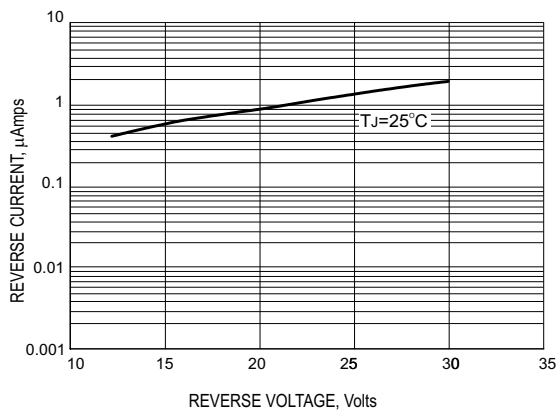




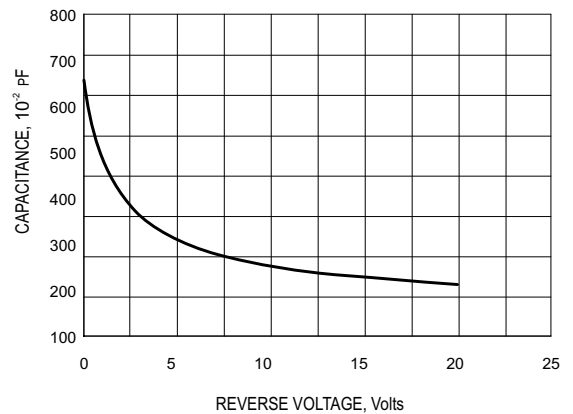
**TYPICAL REVERSE CURRENT**



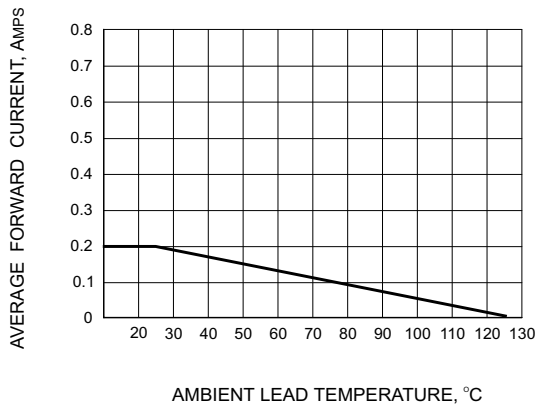
**TYPICAL FORWARD VOLTAGE**



**TYPICAL REVERSE CURRENT**

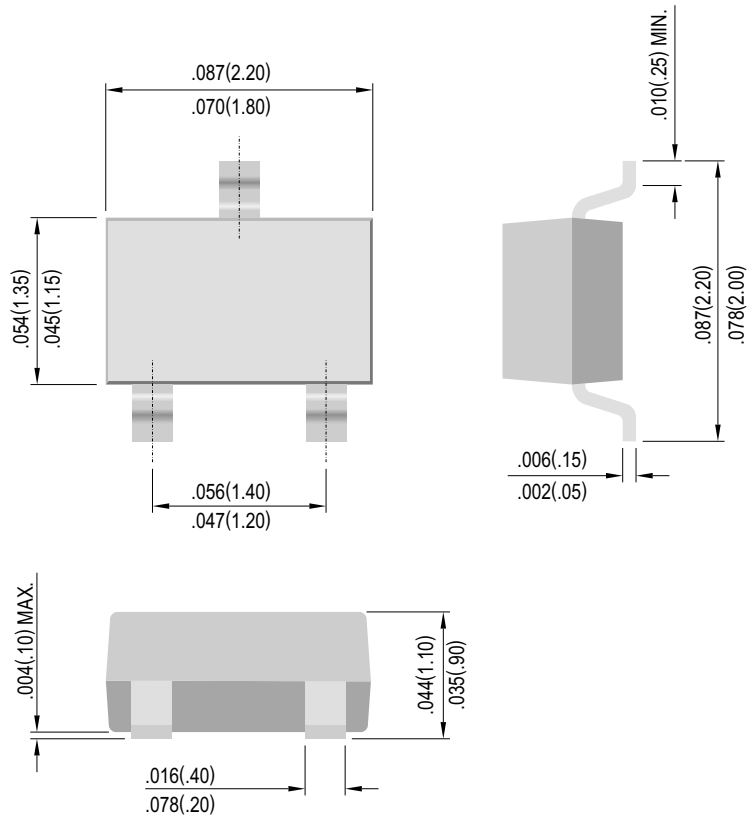


**TYPICAL JUNCTION CAPACITANCE**



**CURRENT DERATING**

**SOT-323**



© Copyright Panjit International Inc. 2001

All rights are reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner.

The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use.

Publication thereof does not convey nor imply any license under patent or other industrial or intellectual property rights.

**PanJit International Inc.**

TEL:886-7-6213121 Fax:886-7-6213129 Internet: <http://www.panjit.com.tw> email: [sales@panjit.com.tw](mailto:sales@panjit.com.tw)