

SURFACT MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts

CURRENT 0.2 Ampers

PACKAGE SOT-23

FEATURES

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

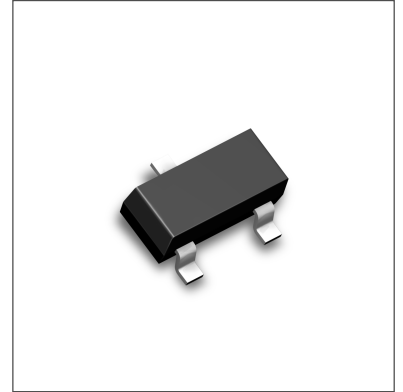
MECHANICAL DATA

Case: SOT-23, Plastic

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

Approx. Weight: 0.008 gram

Marking: L4, L42, L43, L44



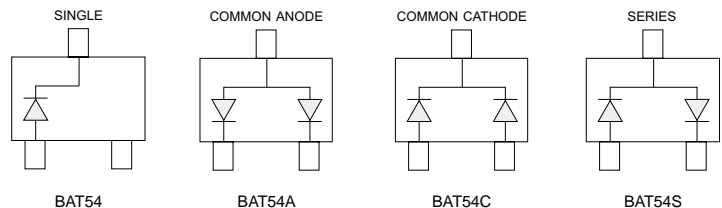
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

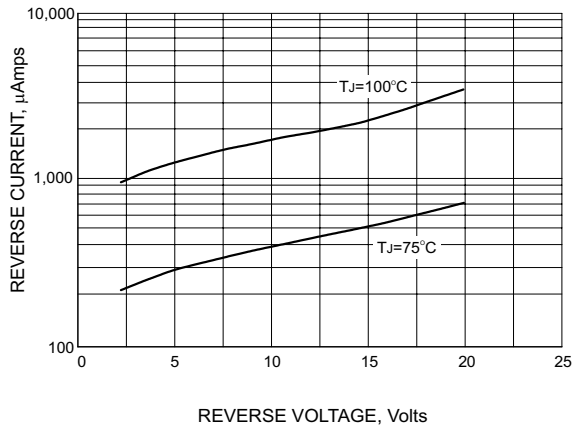
Ratings at 25°C ambient temperature unless otherwise specified.

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

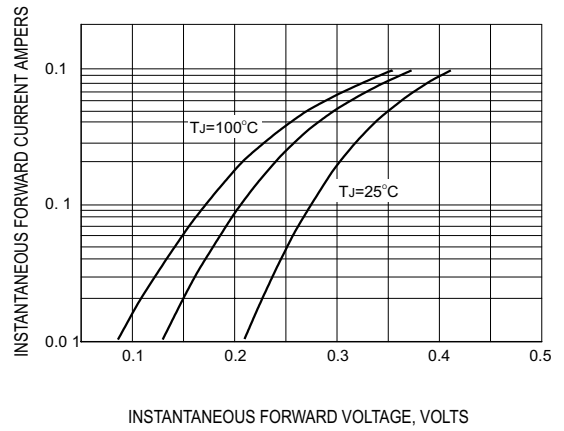
For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54	BAT54A	BAT54C	BAT54S	Units
Peak Repetitive Reverse Voltage	V _{RRM}	30	30	30	30	V
Maximum Average Forward Current at Ta=25°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 =0.001A 1.0 @ I _F =0.1A				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.002 @ V _R =25V				mA
Thermal Resistance, Junction to Ambient Air	R _{θJA}	635				°C / W
Operating Junction Temperature Range	T _J	-55 TO +125				°C
Storage Temperature Range	T _{STG}	-55 TO +125				°C

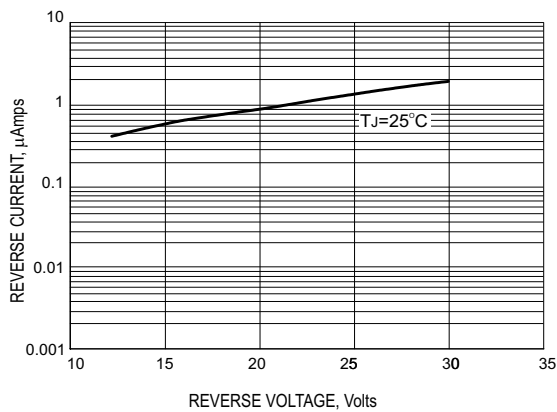




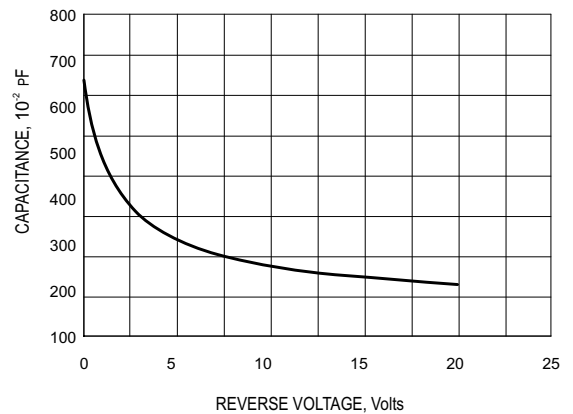
TYPICAL REVERSE CURRENT



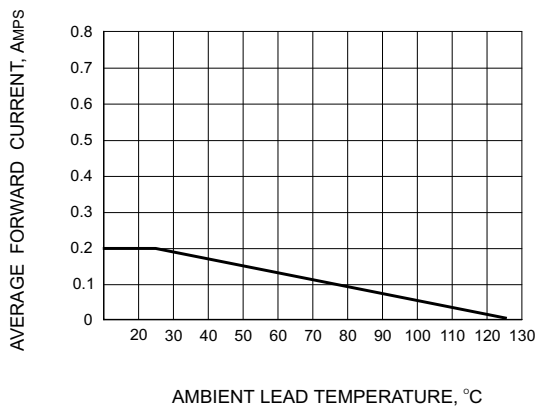
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT

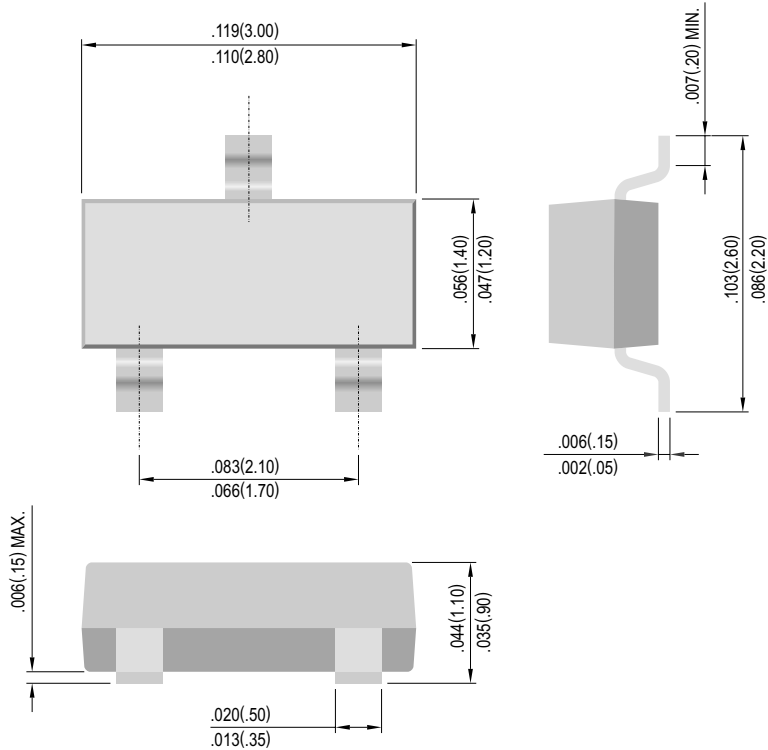


TYPICAL JUNCTION CAPACITANCE

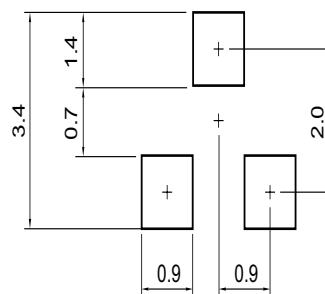


CURRENT DERATING

SOT-23



Suggested Mounting Pad Layout



Dimensions in (millimeters)

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