



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAT54
BAT54A
BAT54C
BAT54S

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 30 Volts

CURRENT - 0.2 Ampere

FEATURES

- * For general purpose applications
- * Low turn-on voltage.
- * Fast switching time.
- * Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

MECHANICAL DATA

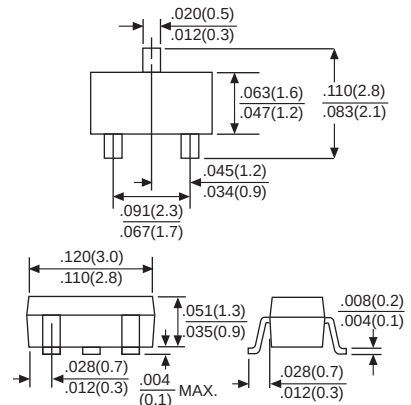
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



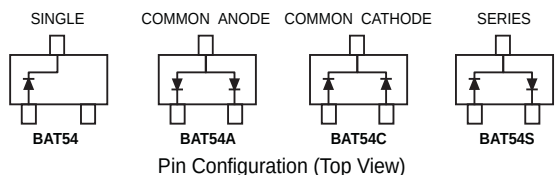
SOT-23



Dimensions in inches and (millimeters)

	SYMBOL	BAT54	BAT54A	BAT54C	BAT54S	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	30				Volts
Maximum RMS Voltage	VRMS	21				Volts
Maximum DC Blocking Voltage	VDC	30				Volts
Maximum Average Forward Rectified Current at TA=25°C	IO	0.2				Amps
Peak Forward Surge Current at t=1S	IFSM	0.6				Amps
Maximum Instantaneous Forward Voltage	VF	1.0 @ IF=0.1A				Volts
		0.32 @ IF=0.001A				
Maximum DC Reverse Current @ VR=25V	IR	2.0				μAmps
Typical Thermal Resistance (Note 1)	RθJA	500				°C/W
Typical Junction Capacitance (Note 2)	CJ	10				pF
Storage Operating Temperature Range	TJ, TSTG	-55 to +125				°C

NOTES : 1. Terminals maintained at specified ambient temperature.
2. Measured at 1 MHz and applied reverse voltage of 1.0 volts.



RATING AND CHARACTERISTIC CURVES (BAT54/A/C/S)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

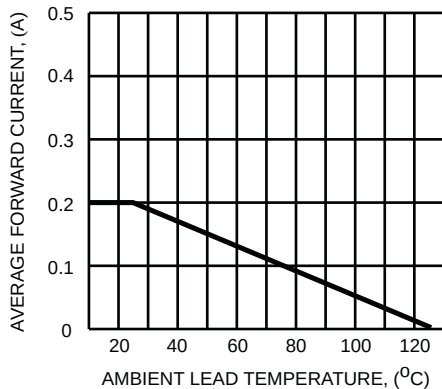


FIG. 2
TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

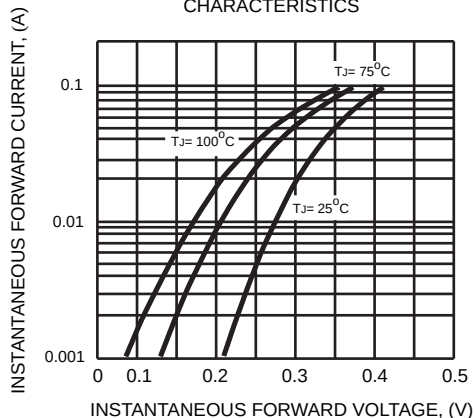


FIG. 3
TYPICAL REVERSE CHARACTERISTICS

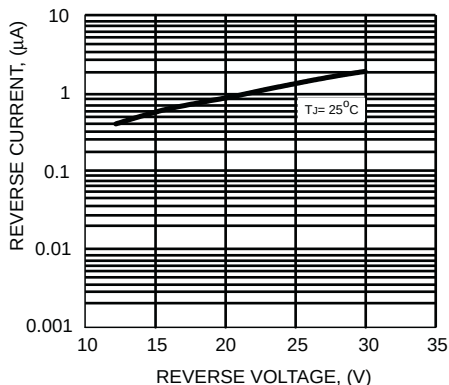


FIG. 4
TYPICAL REVERSE CHARACTERISTICS

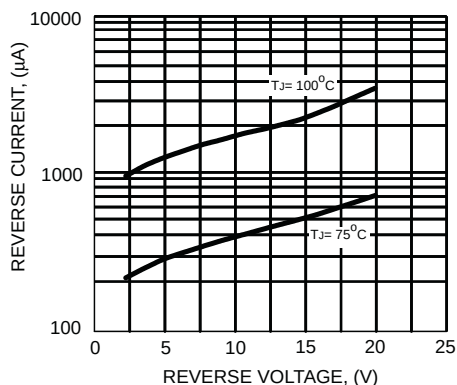
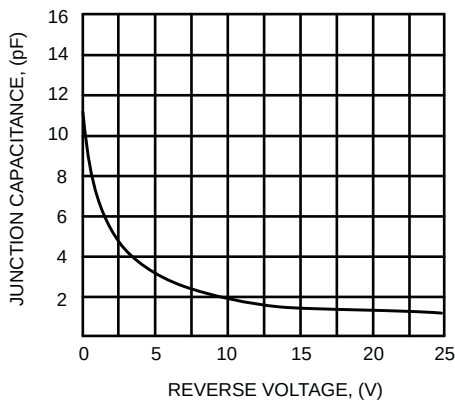


FIG. 5
TYPICAL JUNCTION CAPACITANCE



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