



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAT54W
BAT54AW
BAT54CW
BAT54SW

TECHNICAL SPECIFICATIONS OF SMALL SIGNAL SCHOTTKY BARRIER DIODES
VOLTAGE - 30 Volts
CURRENT - 0.2 Amperes

FEATURES

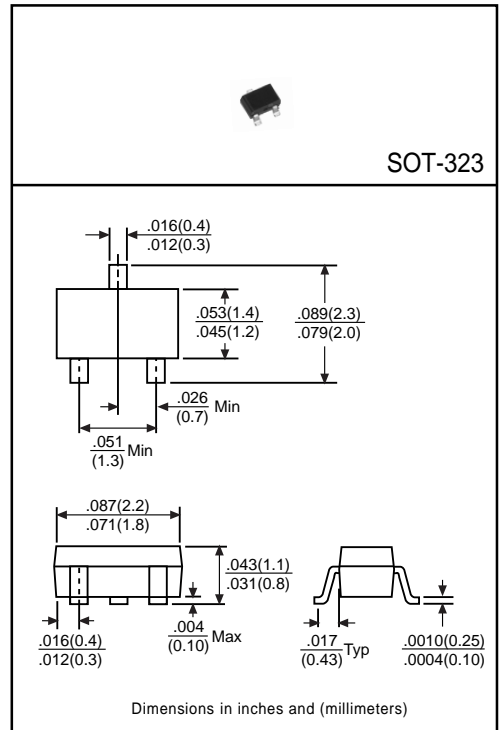
- * For general purpose applications
- * Low turn-on voltage.
- * Fast switching time.
- * Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

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.

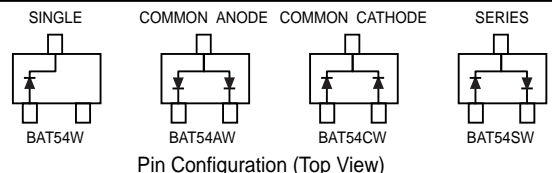
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.



	SYMBOL	BAT54W	BAT54AW	BAT54CW	BAT54SW	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}			30		Volts
Maximum RMS Voltage	V _{RMS}			21		Volts
Maximum DC Blocking Voltage	V _{DC}			30		Volts
Maximum Average Forward Rectified Current at T _A =75°C	I _O			0.2		Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}			0.6		Amps
Maximum Instantaneous Forward Voltage	V _F	1.0 @ I _F =0.1A				Volts
		0.32 @ I _F =0.001A				
Maximum DC Reverse Current at T _A =25°C, V _R =25V	I _R			2.0		μAmps
Typical Thermal Resistance (Note1)	R _{θJA}			635		°C/W
Typical Junction Capacitance (Note 2)	C _J			10		pF
Storage Operating Temperature Range	T _J , T _{STG}			-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 (BAT54W, BAT54AW, BAT54CW, BAT54SW)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

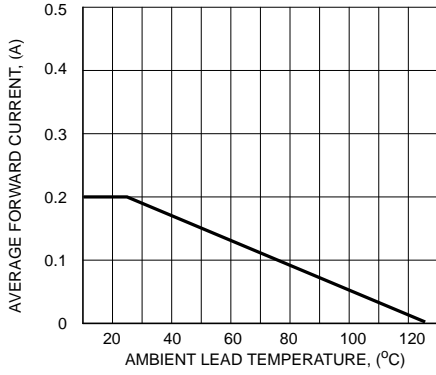


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

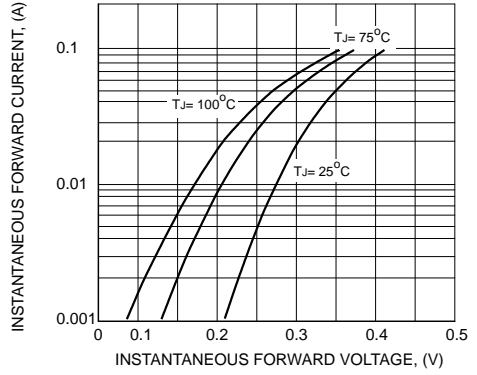


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

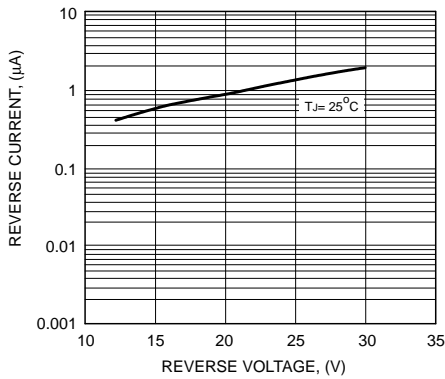


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

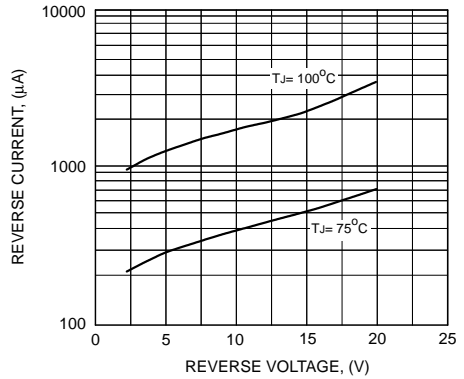


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

