



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAT46W

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 100 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

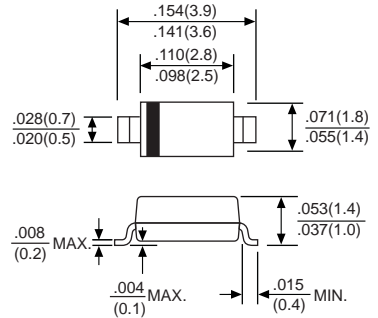
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.



SOD-123



Dimensions in inches and (millimeters)

	SYMBOL	BAT46W	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	Volts
Maximum RMS Voltage	V _{RMS}	85	Volts
Maximum DC Blocking Voltage	V _{DC}	85	Volts
Maximum Average Forward Rectified Current at T _A =25°C	I _O	0.2	Amps
Peak Forward Surge Current at t=10mS	I _{FSM}	4.0	Amps
Maximum Instantaneous Forward Voltage	V _F	1.0 @ I _F =0.2A	
		0.4 @ I _F =0.01A	0.33 @ I _F =0.002A
Maximum DC Reverse Current @ V _R =25V	I _R	0.5	μAmps
Typical Thermal Resistance (Note 1)	R _{θJA}	200	°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 (BAT46W)

FIG. 1
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT DIFFERENT TEMPERATURES

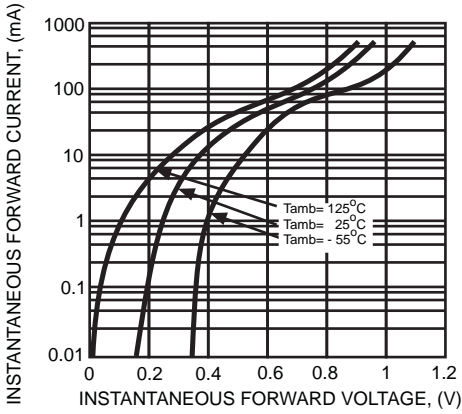


FIG. 2
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

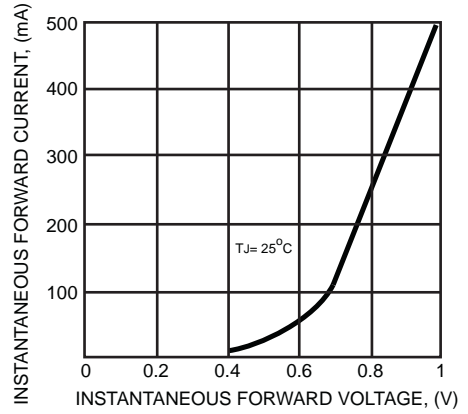


FIG. 3
TYPICAL REVERSE CURRENT VERSUS AMBIENT TEMPERATURE

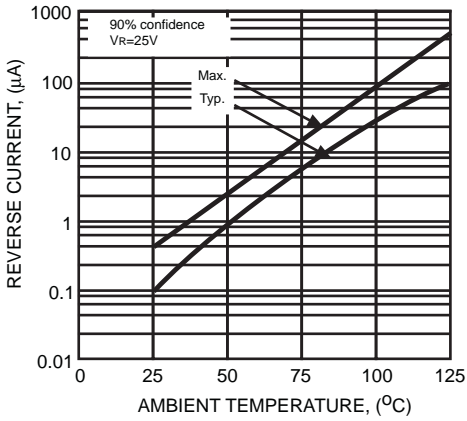


FIG. 4
TYPICAL REVERSE CHARACTERISTICS

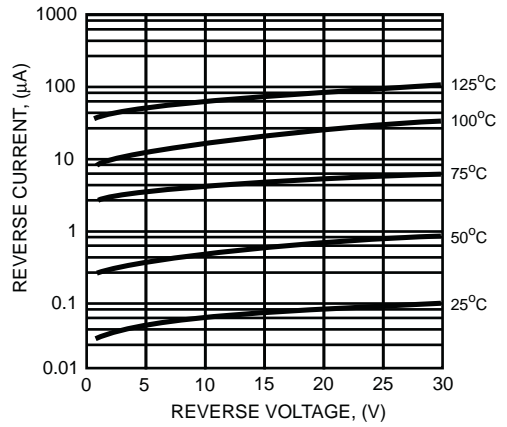


FIG. 5
TYPICAL JUNCTION CAPACITANCE

