



FUKUCOM COMPANY LTD.

福靈有限公司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206



RECTIFIER SPECIALISTS

BAT42
BAT43

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

FEATURES

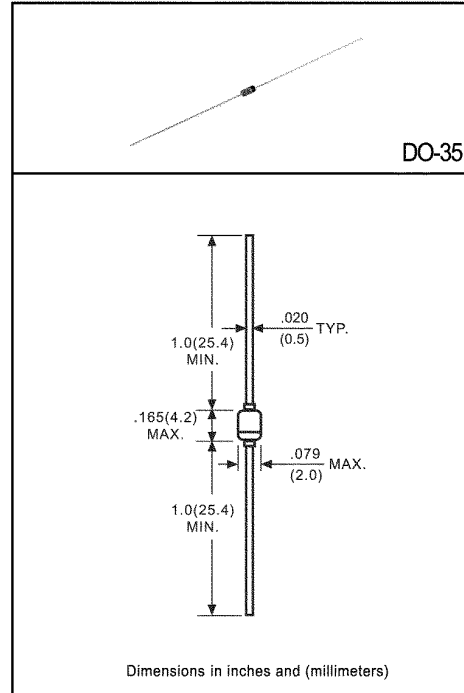
- * For general purpose applications
- * Low turn-on voltage.
- * Fast switching time.
- * Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

MECHANICAL DATA

- * Case: Glass sealed case
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.13 gram

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	BAT42	BAT43	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=75°C	IO	0.2		Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	4.0		Amps
Maximum Instantaneous Forward Voltage	VF	1.0 @ IF=0.2A		Volts
		0.4 @ IF=0.01A	0.33 @ IF=0.002A	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@TA = 25°C	0.5	µAmps
		@TA = 100°C	100	
Typical Thermal Resistance (Note1)	RθJA	300		°C/W
Typical Junction Capacitance (Note 2)	Cj	10		pF
Storage Operating Temperature Range	TJ, TSTG	-55 to + 125		°C

NOTES : 1. Leads maintained at specified ambient temperature at a distance of 4.0mm from case.
2. Measured at 1 MHz and applied reverse voltage of 1.0 volts.



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

RATING AND CHARACTERISTIC CURVES (BAT42 AND BAT43)

FIG. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT DIFFERENT TEMPERATURES

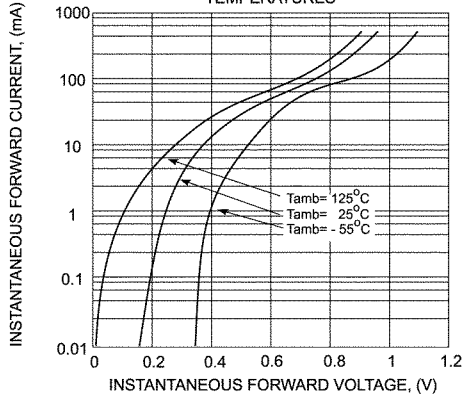


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

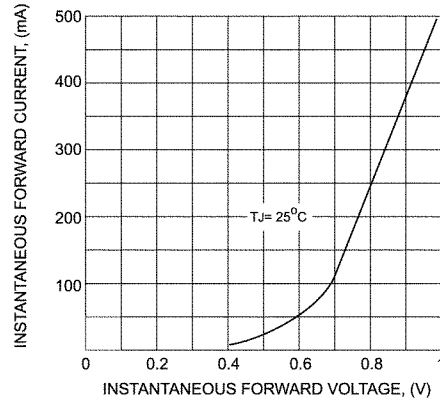


FIG. 3 - TYPICAL REVERSE CURRENT VERSUS AMBIENT TEMPERATURE

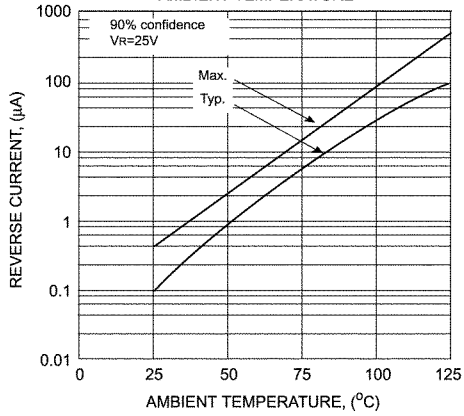


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

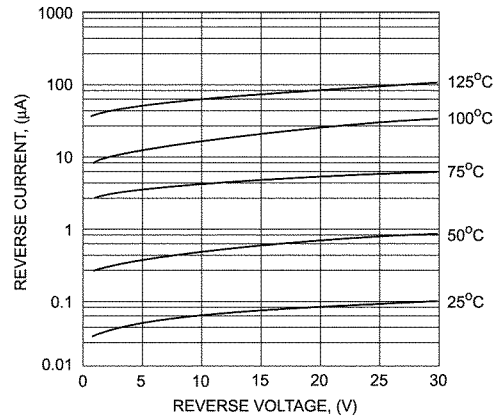


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

