



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAT85

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 30 Volts

CURRENT - 0.2 Ampere

FEATURES

- * For general purpose applications
- * This diode features very low turn-on voltage and fast switching. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

MECHANICAL DATA

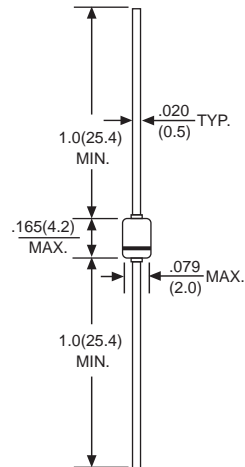
- * Case: Glass sealed case
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.13 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.



DO-35



Dimensions in inches and (millimeters)

	SYMBOL	BAT85	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 at t=10mS	I _{FSM}	4.0	Amps
Maximum Instantaneous Forward Voltage @ I _F =0.1A	V _F	0.8	Volts
Maximum DC Reverse Current @ V _R =25V	I _R	2.0	μAmps
Typical Thermal Resistance (Note 1)	R _{θJA}	300	°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. 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.

RATING AND CHARACTERISTIC CURVES (BAT85)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

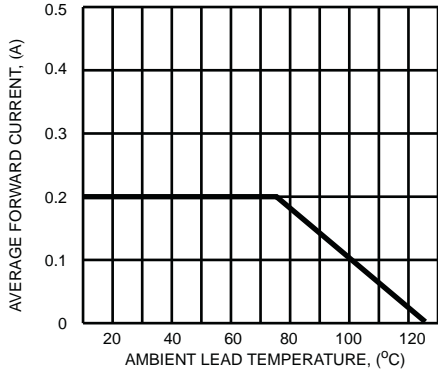


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

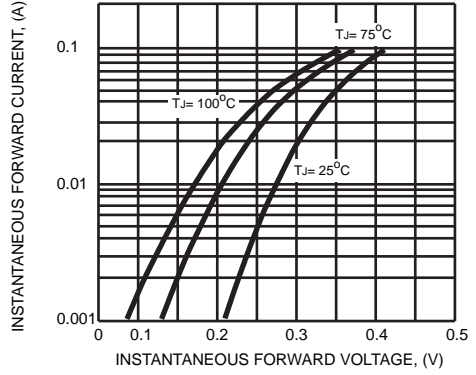


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

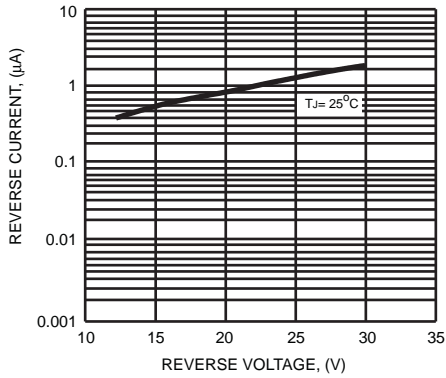


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

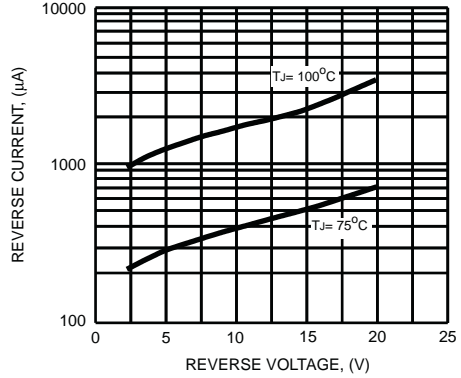
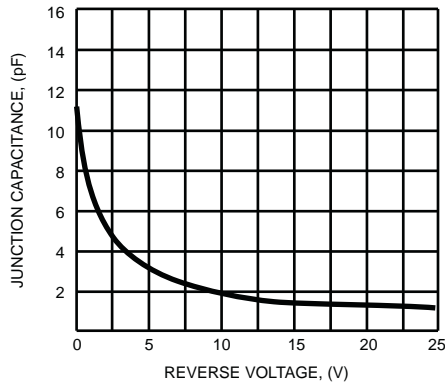


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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