



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

BAT85

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

FEATURES

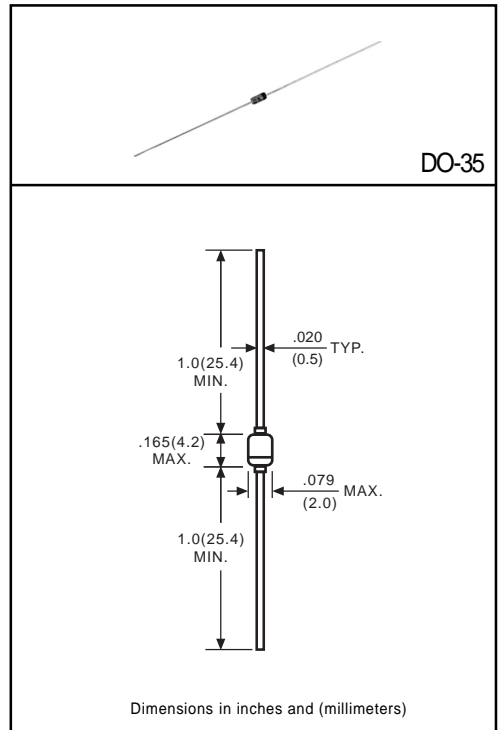
- * For general purpose applications
- * This diode features very low turn-on voltage and fast switching. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

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

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	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 TA=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}	4.0	Amps
Maximum Instantaneous Forward Voltage at 0.1A DC	V _F	0.8	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage, TA=25°C	I _R	2.0	μAmps
Typical Thermal Resistance (Note1)	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

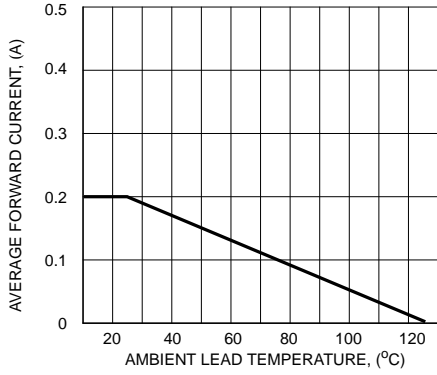


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

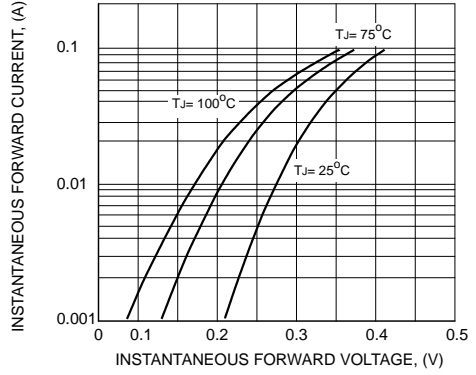


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

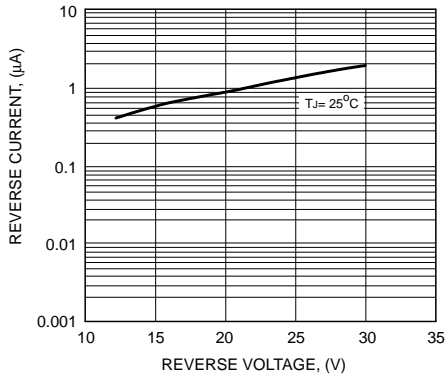


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

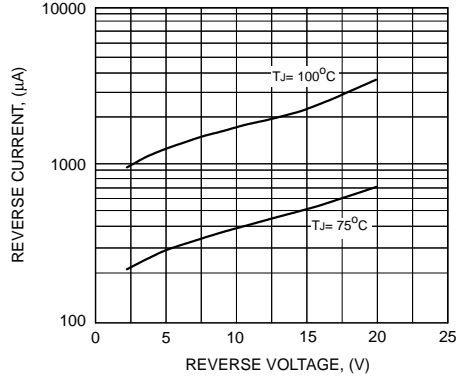


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

