

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

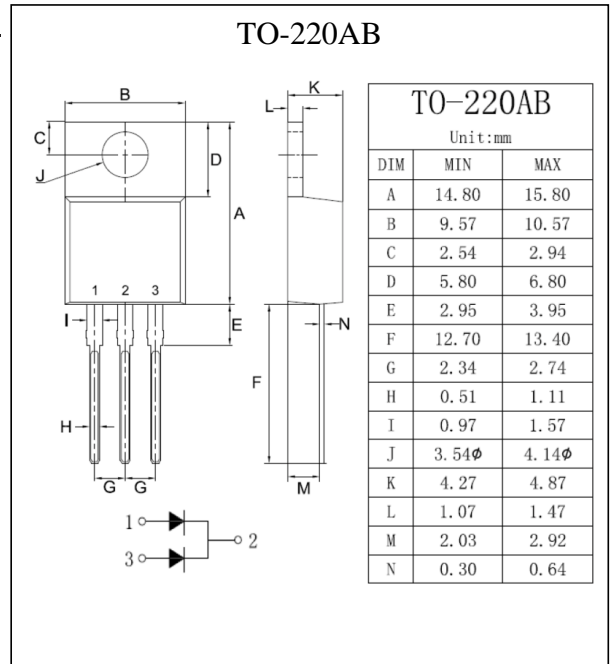
VOLTAGE	100 Volts
CURRENT	20 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%

PARAMETER	SYMBOL	MBR20100CTL	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	$V_{DC(AV)}$	100	V
Average Rectified Output Current @ $T_c=110^\circ C$	I_F	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum Forward Voltage Note(1) IF=10A@ Tj=25°C IF=10A@ Tj=125°C	V_F	0.79 0.75	V
Maximum DC Reverse Current at Rated DC Blocking Voltage Tj=25°C Tj=125°C	I_R	0.01 10	mA
Typical thermal resistance Junction to Case (Note 3)	$R_{\theta JC}$	2.5	°C/W
Typical thermal resistance Junction to Lead (Note 3)	$R_{\theta JL}$	2.5	°C/W
Typical Thermal Resistance (Note 2)	C_J	250	pF
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

RATING AND CHARACTERISTIC CURVES

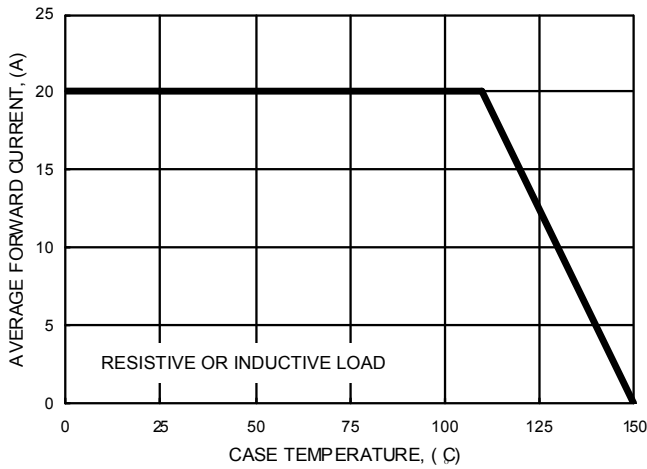


FIG.1- FORWARD CURRENT DERATING CURVE

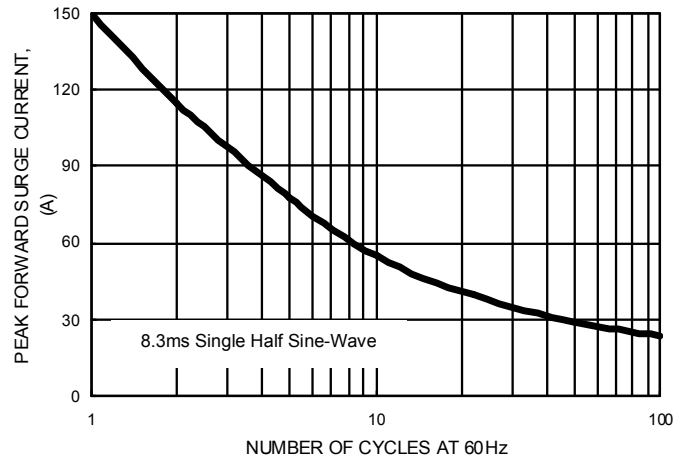


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

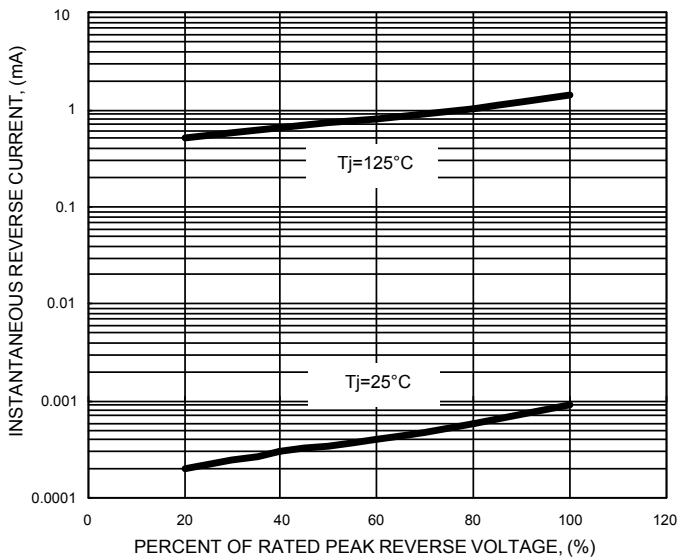


FIG.3- TYPICAL REVERSE CHARACTERISTICS

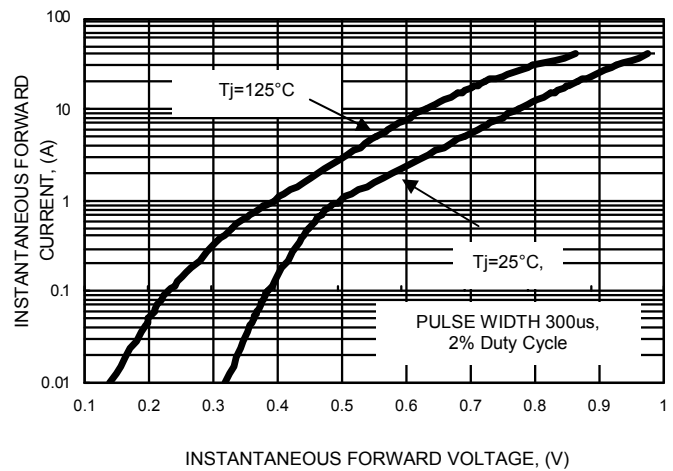


FIG.4- TYPICAL FORWARD CHARACTERISTICS

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