

10 AMPERES SCHOTTKY BARRIER RECTIFIERS

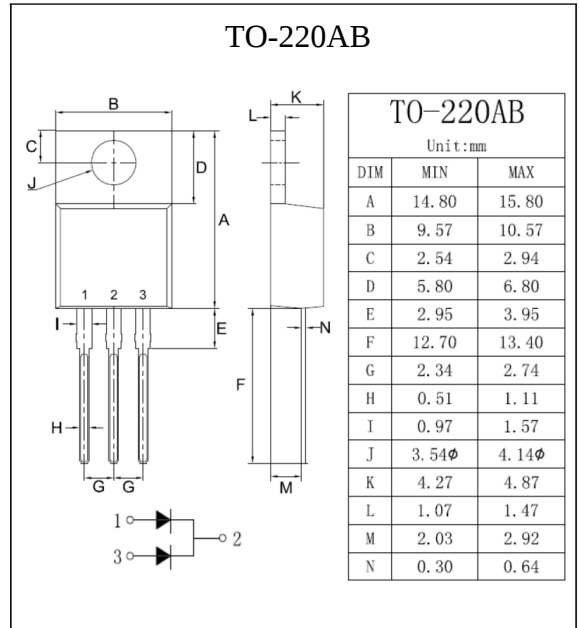
VOLTAGE	40 to 200 Volts
CURRENT	10 Amperes

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
- Guardring for overvoltage protection
- 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	MBR 1040CTD	MBR 1045CTD	MBR 1050CTD	MBR 1060CTD	MBR 1080CTD	MBR 1090CTD	MBR 10100CTD	MBR 10150CTD	MBR 10200CTD	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See fig.1)	I _{F(AV)}	10									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100				110					A
Maximum Forward Voltage at 5A, per leg	V _F	0.7		0.8		0.85			0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T =25°C T =125°C	I _R	0.05 20				0.02 20					mA
Typical Thermal Resistance	R _{θJC}	3									°C / W
Operating and Storage Junction Temperature Range	T _J ,T _{STG}	-55 to + 150							-55 to + 175		°C

RATING AND CHARACTERISTIC CURVES

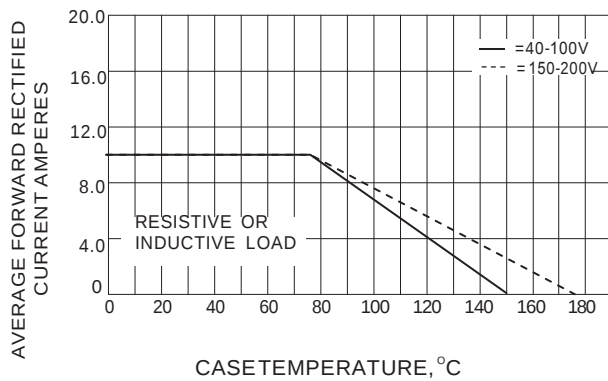


Fig.1 - FORWARD CURRENT DERATING CURVE

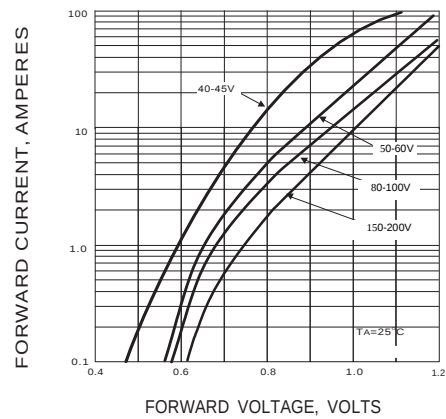


Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

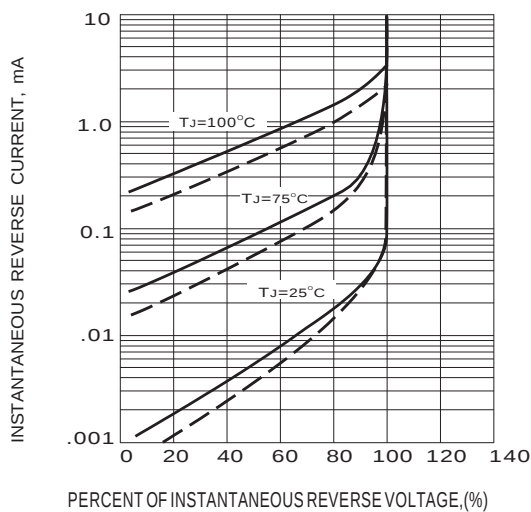


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

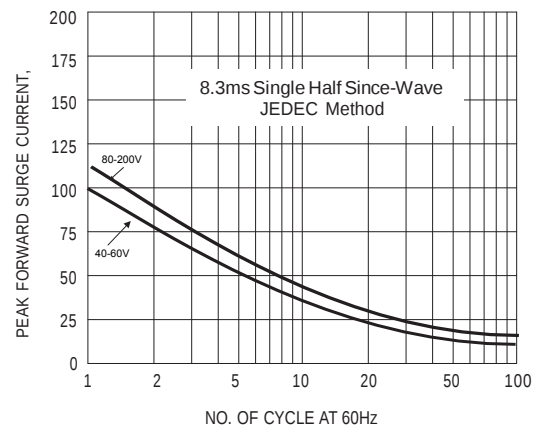


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

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