

MBR1040CT~MBR10200CT

10 AMPERES SCHOTTKY BARRIER RECTIFIERS

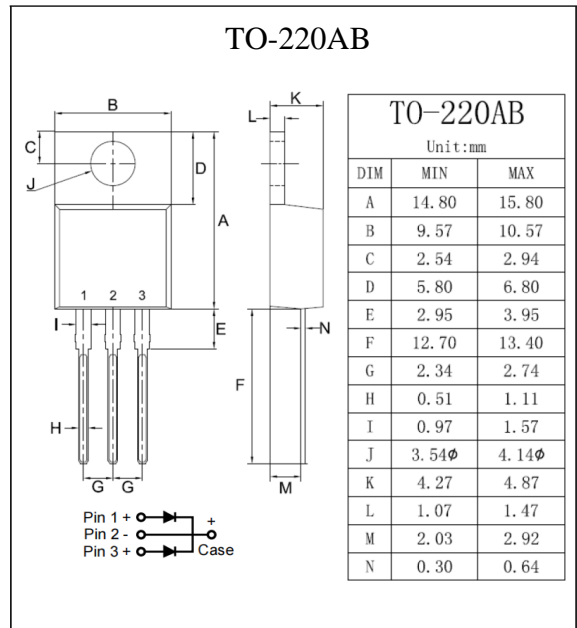
VOLTAGE	40 to 200 Volts
CURRENT	10 Amperes

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 1040CT	MBR 1045CT	MBR 1050CT	MBR 1060CT	MBR 1080CT	MBR 1090CT	MBR 10100CT	MBR 10150CT	MBR 10200CT	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 $T=25^{\circ}C$ $T=125^{\circ}C$	I_R	0.05 20				0.02 20				mA	
Typical Thermal Resistance	$R_{\theta JC}$	3									$^{\circ}C / W$
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-55 to + 150							-55 to + 175		$^{\circ}C$

RATING AND CHARACTERISTIC CURVES

