



MBRF4040CTD~MBRF40200CTD

40 AMPERES SCHOTTKY BARRIER RECTIFIERS

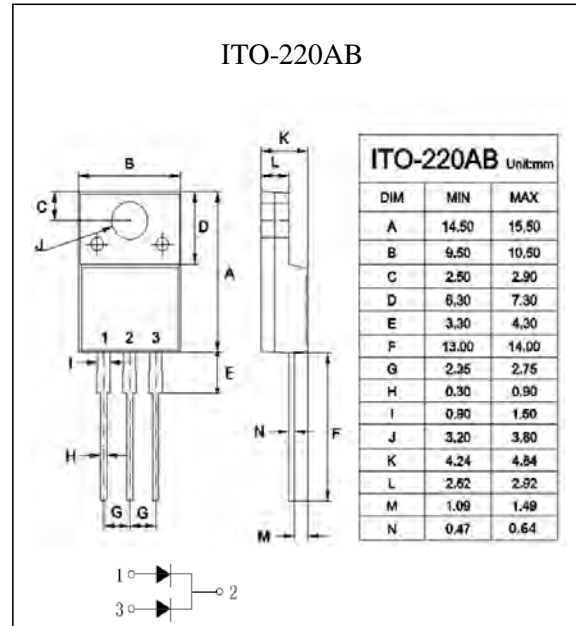
VOLTAGE	40 to 200 Volts
CURRENT	40 Amperes

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 2011/65/EU directives

MECHANICAL DATA

- Case: ITO-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	MBRF 4040CTD	MBRF 4045CTD	MBRF 4050CTD	MBRF 4060CTD	MBRF 4080CTD	MBRF 4090CTD	MBRF 40100CTD	MBRF 40150CTD	MBRF 40200CTD	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	$I_{F(AV)}$	40									A	
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200									A	
Maximum Forward Voltage 20A per leg	V_F	0.7		0.8		0.85			0.92		V	
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	I_R	0.05				0.02				20		mA
Typical Thermal Resistance	$R_{\theta JC}$	2.2									$^\circ\text{C} / \text{W}$	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							-55 to +175			$^\circ\text{C}$



RATING AND CHARACTERISTIC CURVES

