



10A SCHOTTKY Barrier Rectifier

Voltage - 40 to 200 Volts Current - 10 Amperes

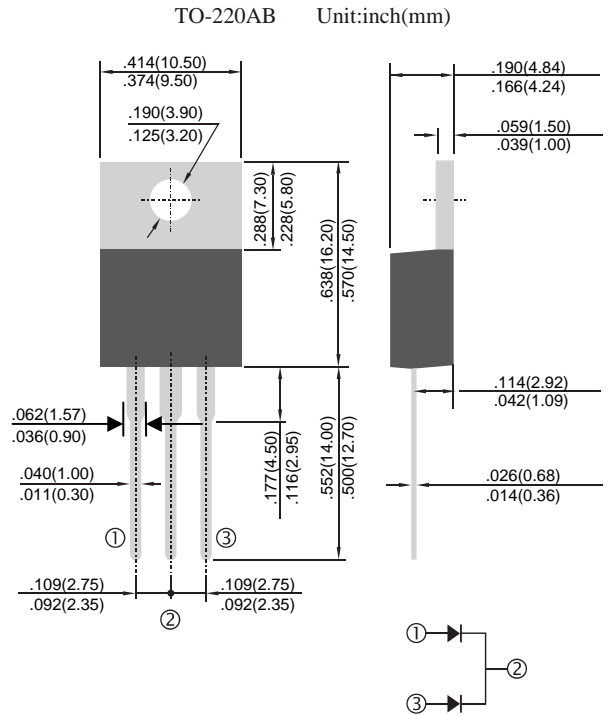


Features

- 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
- 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 & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

(Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.)

Parameters	Symbol	MBR 1040CT	MBR 1045CT	MBR 1050CT	MBR 1060CT	MBR 1080CT	MBR 1090CT	MBR 10100CT	MBR 10150CT	MBR 10200CT	Unit
Maximum Repetitive 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 Rectified Current	$I_{(AV)}$	10									A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	110					125				A
Maximum Instantaneous Forward Voltage at 5.0A Per Diode	V_F	0.6		0.75		0.85		0.92		V	
Maximum DC Reverse Current $T_a=25^\circ C$ at Rated DC Blocking Voltage $T_a=125^\circ C$	I_R	0.05					0.02				mA
Typical Junction Capacitance (Note 1)	C_J	420		360		280		200		pF	
Maximum Thermal Resistance	$R_{\theta JC}$	3									$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150							-55 to +175		$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							-55 to +175		$^\circ C$

Notes: 1. Measure at 1.0MHz and applied reverse voltage of 4.0 Vdc.

DEVICE CHARACTERISTICS

MBR1040CT THRU MBR10200CT

