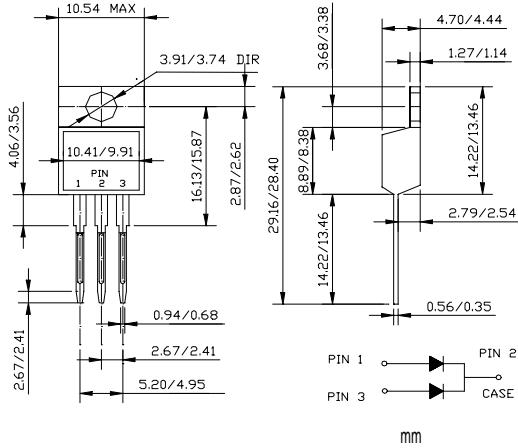


# MBR1040CT THRU MBR10200CT

## SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 40 to 200Volts FORWARD CURRENT - 10.0 Amperes

### TO-220AB



### FEATURES

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

### MECHANICAL DATA

- ◇ Case: JEDEC TO-220AB, molded plastic body
- ◇ Terminals: Leads, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.08 ounce, 2.24 grams
- ◇ 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	MBR1040CT	MBR1045CT	MBR1050CT	MBR1060CT	MBR1080CT	MBR1090CT	MBR10100CT	MBR10150CT	MBR10200CT	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)	$I_{FSM}$	150									A
Maximum Forward Voltage at 5A, per leg	$V_F$	0.7		0.75			0.8		0.9		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 20				mA
Typical Thermal Resistance	$R_{\theta JC}$						2				$^\circ\text{C} / \text{W}$
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-55 to +150								-65 to +175	$^\circ\text{C}$

