

# MBR15150CT-MBR15200CT

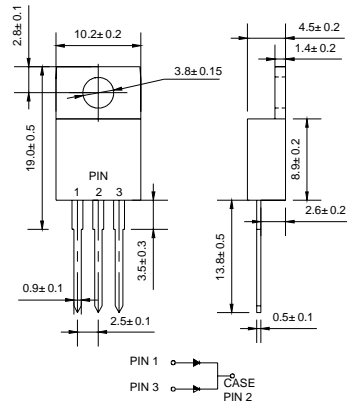
Schottky Barrier Rectifiers

**Reverse Voltage: 150---200V**

**Forward Current: 15A**



## TO-220AB



Dimensions in millimeters

## Features

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capacity
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

## Mechanical Data

- ◇ **Case:** JEDEC TO-220AB, molded plastic body
- ◇ **Polarity:** As marked
- ◇ **Mounting Position:** Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	MBR15150CT	MBR15200CT	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	150	200	V
Maximum RMS voltage	$V_{RWS}$	135	140	V
Maximum DC blocking voltage	$V_{DC}$	150	200	V
Maximum average forward total device rectified current @ $T_C=100^\circ\text{C}$	$I_{(AV)}$	15		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150		A
Maximum instantaneous forward voltage @7.5A	$V_F$	0.95		V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	0.2 50		mA
Maximum thermal resistance (Note1)	$R_{\theta JC}$	1.5		$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 --- +150		$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 --- +150		$^\circ\text{C}$

**NOTES:** 1. Thermal resistance from junction to case.

## Ratings AND Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

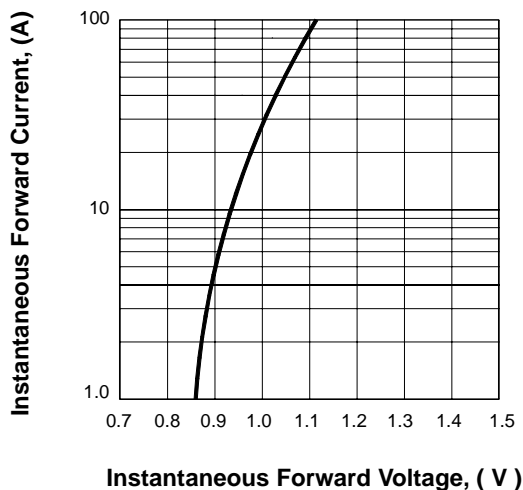


FIG.2 FORWARD DERATING CURVE

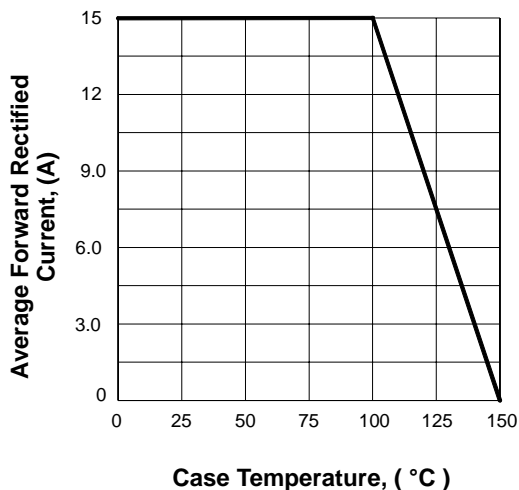


FIG.3 TYPICAL REVERSE CHARACTERISTICS

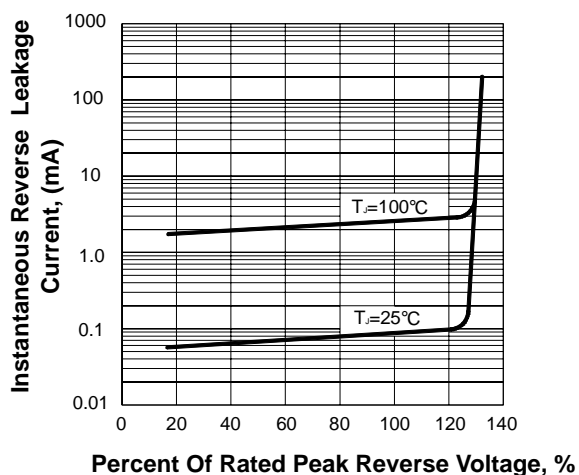


FIG.4 PEAK FORWARD SURGE CURRENT

