



# MBRF30150CT THRU MBRF30200CT

Reverse Voltage - 150 to 200 Volts Forward Current - 30.0 Ampere

## SCHOTTKY BARRIER RECTIFIER

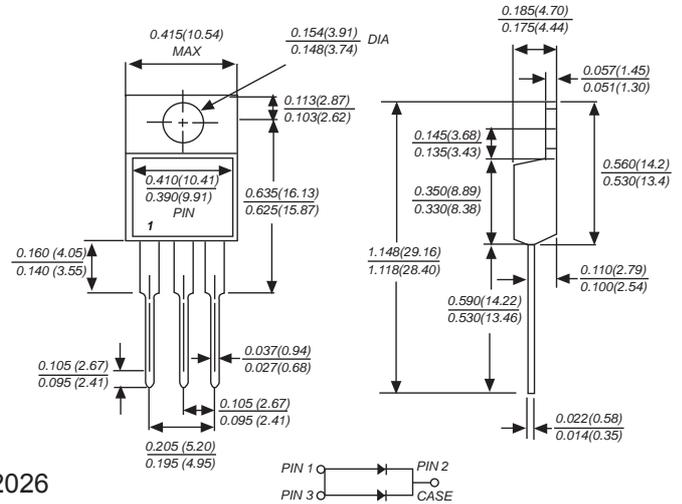
### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

### Mechanical Data

**Case** : JEDEC TO-220AB Molded plastic body  
**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity** : Polarity symbol marking on body  
**Mounting Position** : Any  
**Weight** : 0.080 ounce, 2.24 grams

TO-220AB



Dimensions in inches and (millimeters)

### 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 current derate by 20%.

Parameter	SYMBOLS	MBRF 30150CT	MBRF 30200CT	UNITS
		MDD MBRF 30150CT	MDD MBRF 30200CT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	200	V
Maximum RMS voltage	$V_{RMS}$	135	140	V
Maximum DC blocking voltage	$V_{DC}$	150	200	V
Maximum average forward rectified current (see fig. 1)	$I_{(AV)}$	30.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	300		A
Maximum instantaneous forward voltage at 15.0A	$V_F$	0.95		V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.2 50.0		mA
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	1.5		$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +150		$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150		$^\circ\text{C}$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case.



# MBRF30150CT THRU MBRF30200CT

Reverse Voltage - 150 to 200 Volts Forward Current - 30.0 Ampere

## Ratings And Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

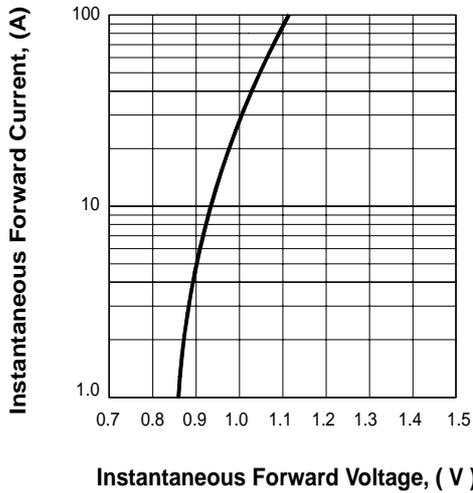


FIG.2 FORWARD DERATING CURVE

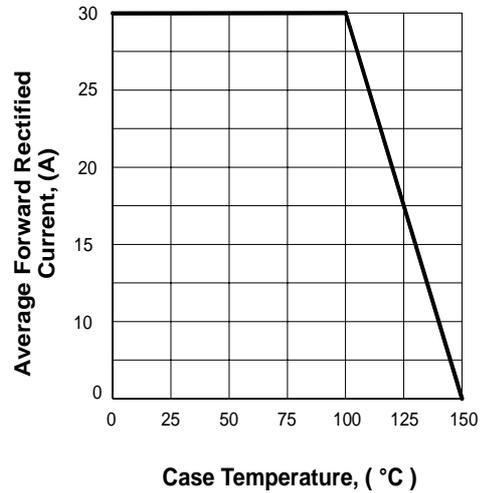
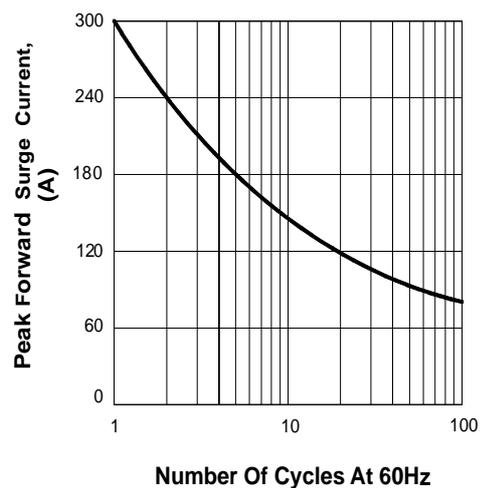
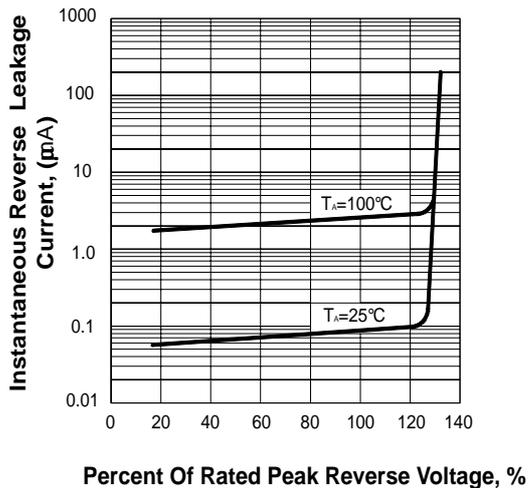


FIG.3 TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.