

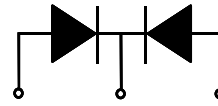
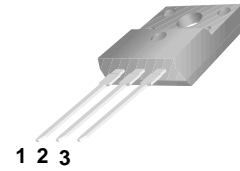


Technologies Int'l

## MBRF20150CT

### Features

- Low forward voltage drop
- High frequency properties and switching speed
- Guard ring for over-voltage protection



1. Anode 2. Cathode 3. Anode

TO-220F

### Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	150	V
$V_R$	Maximum DC Reverse Voltage	150	V
$I_{F(AV)}$	Maximum Average Rectified Current @ $T_C = 120^\circ\text{C}$	20	A
$I_{FSM}$	Maximum Forward Surge Current (per diode) 60Hz Single Half-Sine Wave	150	A
$T_J, T_{STG}$	Operating Junction and Storage Temperature	-40 to +150	$^\circ\text{C}$

### Thermal Characteristics

Symbol	Parameter	Value	Units
$R_{\theta JC}$	Maximum Thermal Resistance, Junction to Case (per diode)	1.5	$^\circ\text{C}/\text{W}$

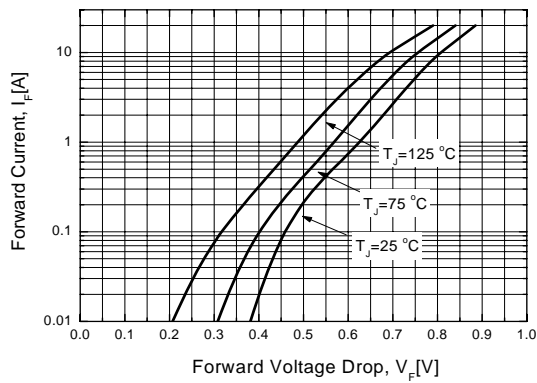
### Electrical Characteristics (per diode)

Symbol	Parameter	Value	Units
$V_{FM}^*$	Maximum Instantaneous Forward Voltage $I_F = 10\text{A}$ $I_F = 10\text{A}$ $I_F = 20\text{A}$ $I_F = 20\text{A}$	$T_C = 25^\circ\text{C}$	V
		$T_C = 125^\circ\text{C}$	
		$T_C = 25^\circ\text{C}$	
		$T_C = 125^\circ\text{C}$	
$I_{RM}^*$	Maximum Instantaneous Reverse Current @ rated $V_R$	$T_C = 25^\circ\text{C}$	mA
		$T_C = 125^\circ\text{C}$	

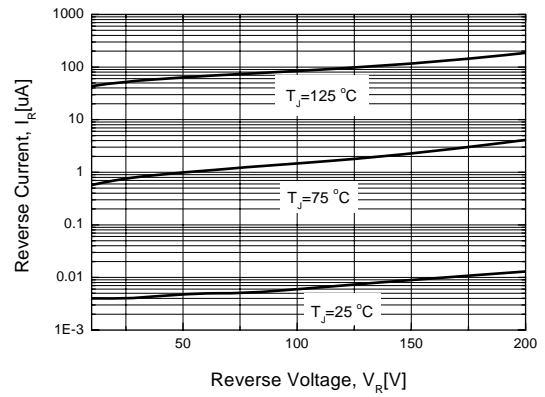
\* Pulse Test: Pulse Width=300 $\mu\text{s}$ , Duty Cycle=2%

# Typical Characteristics

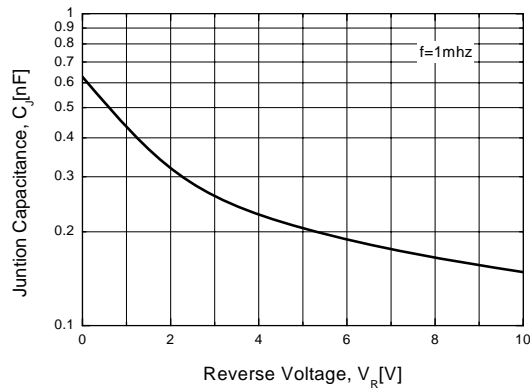
**Figure 1. Forward Current Characteristics**



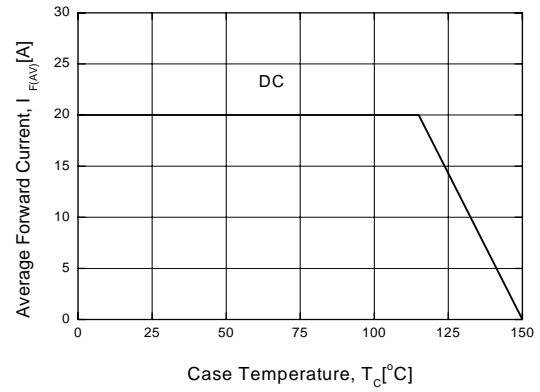
**Figure 2. Reverse Leakage Current**



**Figure 3. Junction Capacitance**

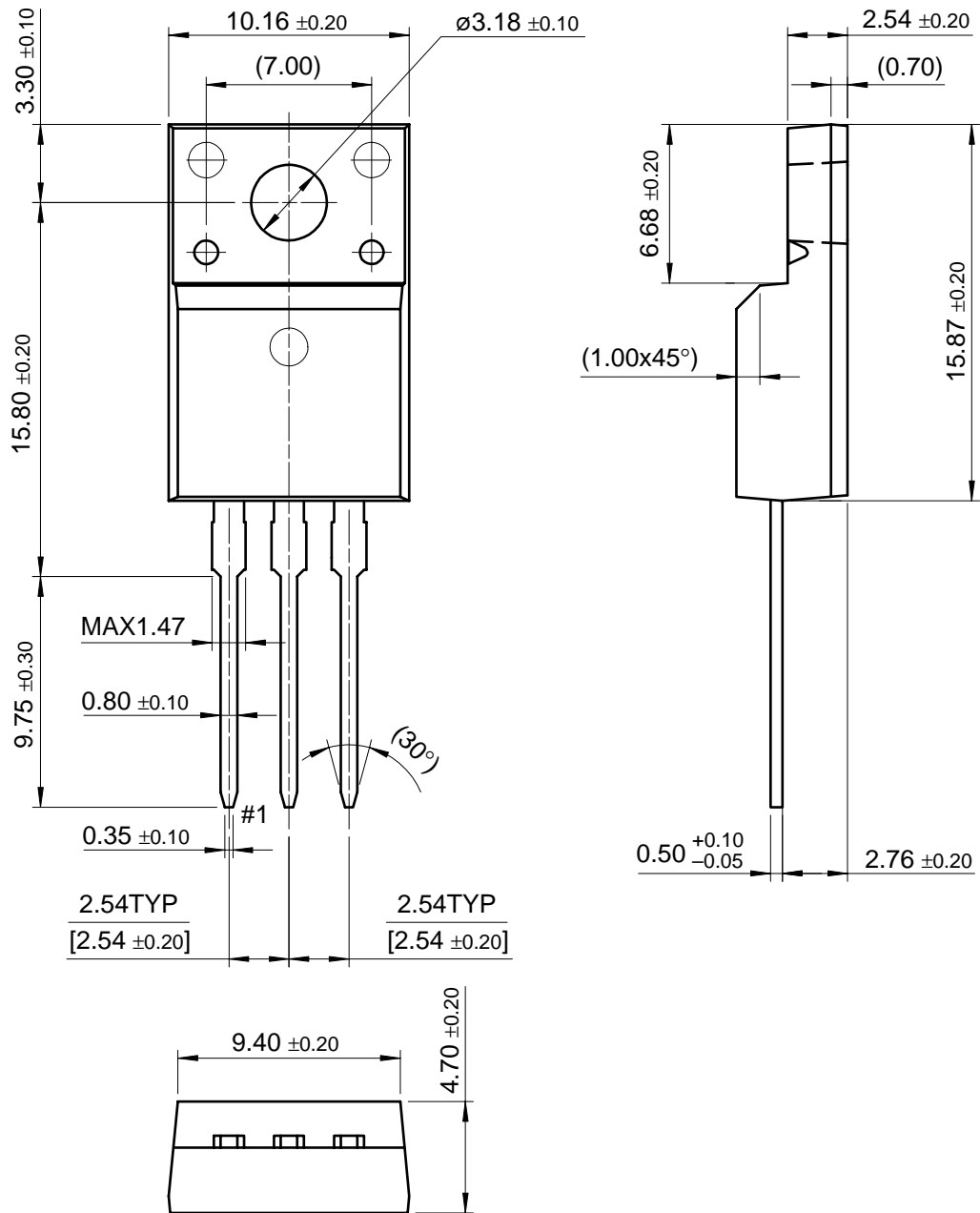


**Figure 4. Power Derating**



Package Dimension

TO-220F



Dimensions in Millimeters