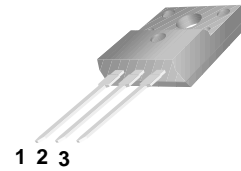




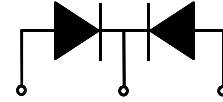
## MBRF10100CT

### Features

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



1 2 3



1. Anode 2.Cathode 3. Anode

TO-220F

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

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	100	V
$V_R$	Maximum DC Reverse Voltage	100	V
$I_{F(AV)}$	Maximum Average Rectified Current @ $T_C = 105^\circ\text{C}$	10	A
$I_{FSM}$	Maximum Forward Surge Current (per diode) 60Hz Single Half-Sine Wave	120	A
$T_J, T_{STG}$	Operating Junction and Storage Temperature	-65 to +150	$^\circ\text{C}$

### Electrical Characteristics (per diode) $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Min.	Typ.	Max.	Units	
$V_{FM}^*$	Maximum Instantaneous Forward Voltage $I_F = 5\text{A}$ $I_F = 5\text{A}$	$T_C = 25^\circ\text{C}$	-	-	0.85	V
		$T_C = 125^\circ\text{C}$	-	-	0.74	
$I_{RM}^*$	Maximum Instantaneous Reverse Current (per diode) @ rated $V_R$	$T_C = 25^\circ\text{C}$	-	-	0.1	mA
		$T_C = 100^\circ\text{C}$	-	-	50	

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

## Typical Characteristics

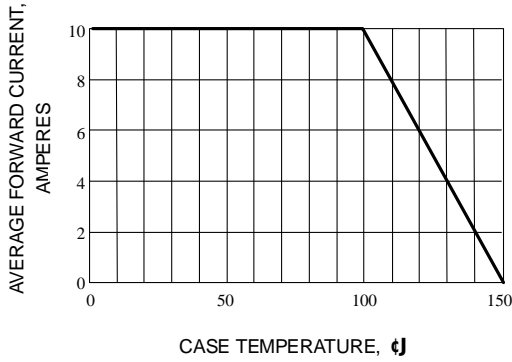


Fig. 1-FORWARD CURRENT DERATING CURVE

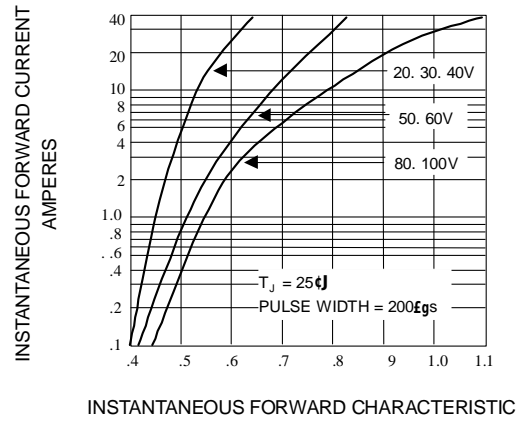


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

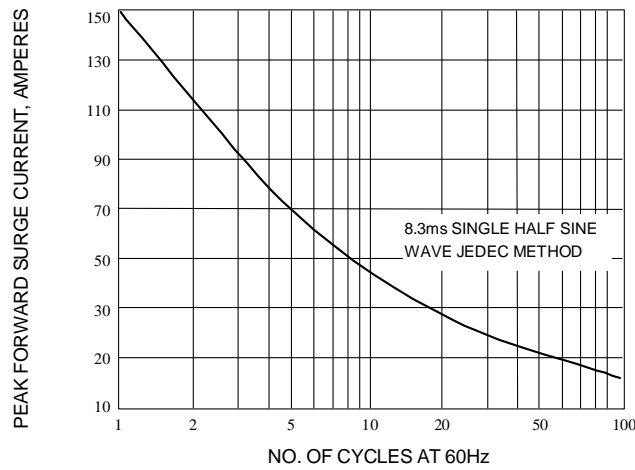
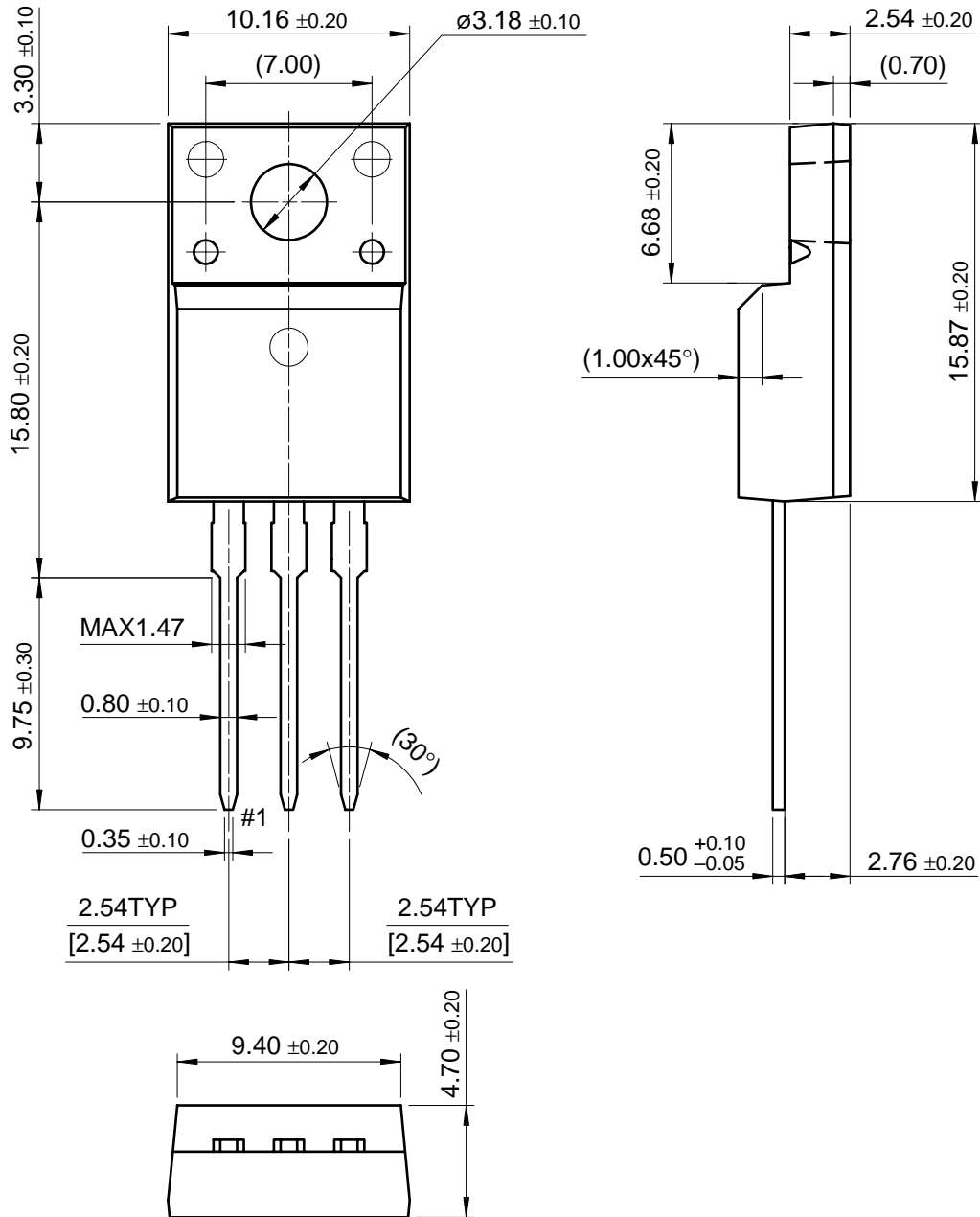


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

Package Dimension

TO-220F



Dimensions in Millimeters