

# MBRF2020CT

Rev.F Mar.-2016

## / Descriptions

Schottky Diode in a TO-220F Plastic Package.

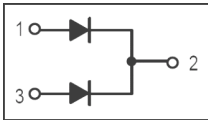
## / Features

Low power loss,high efficiency.

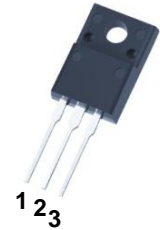
## / Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

## / Equivalent Circuit



## / Pinning



PIN1 Anode    PIN 2 Cathode    PIN 3 Anode

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions.

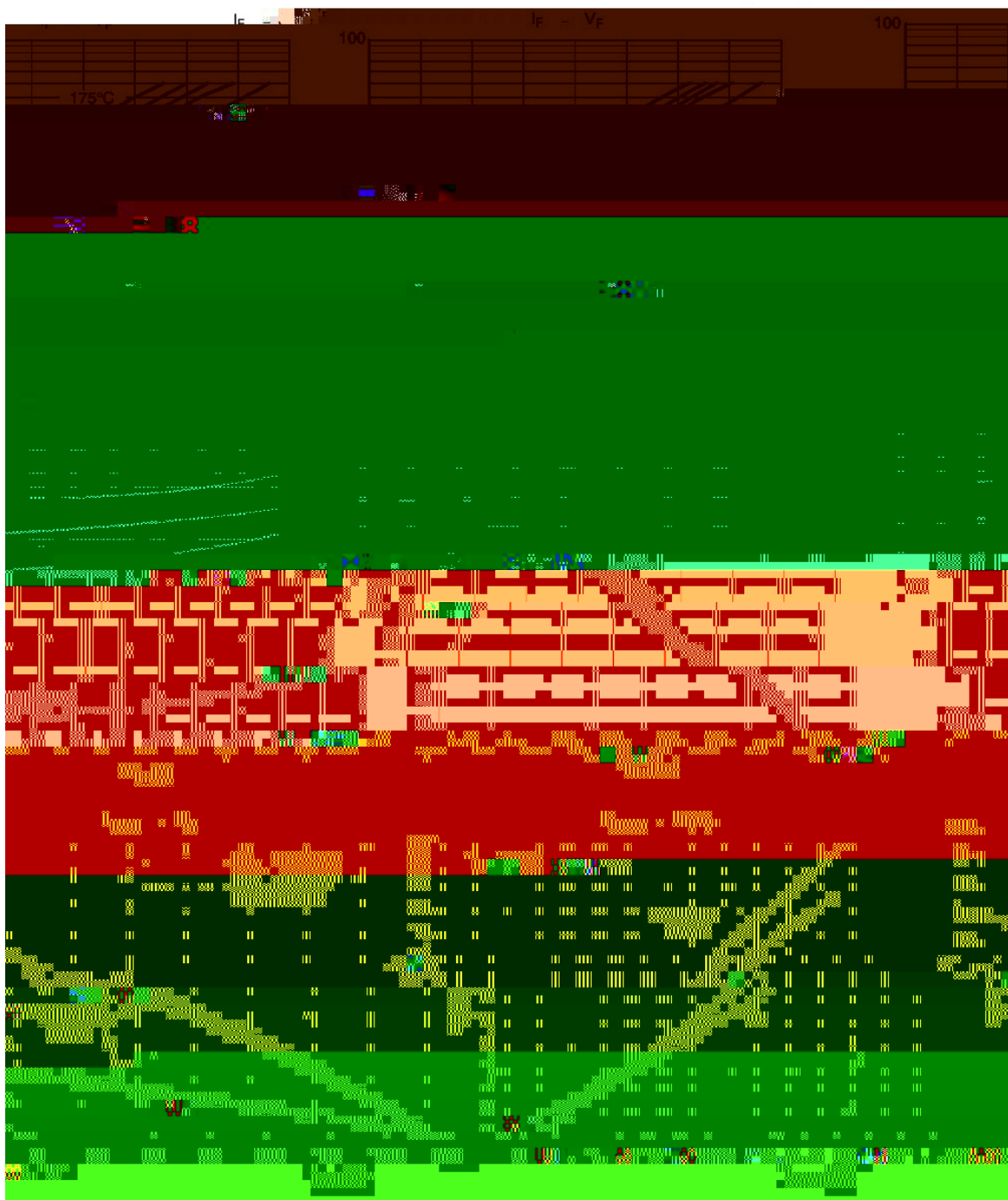
**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
Working Peak Reverse Voltage	$V_{RWM}$	200	V
Peak Repetitive Forward Current	$I_{FRM}$	20	A
Average Rectified Forward Current	$I_{F(AV)}$	10	A
	$I_{F(AV) \text{ total}}$	20	A
Non Repetitive Peak Surge Current	$I_{FSM}$	150	A
Peak Repetitive Reverse Current	$I_{RRM}$	1.0	A
Thermal Resistance Junction to Case	$R_{Jc}$	2.0	/W
Junction Temperature Range	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-65 150	

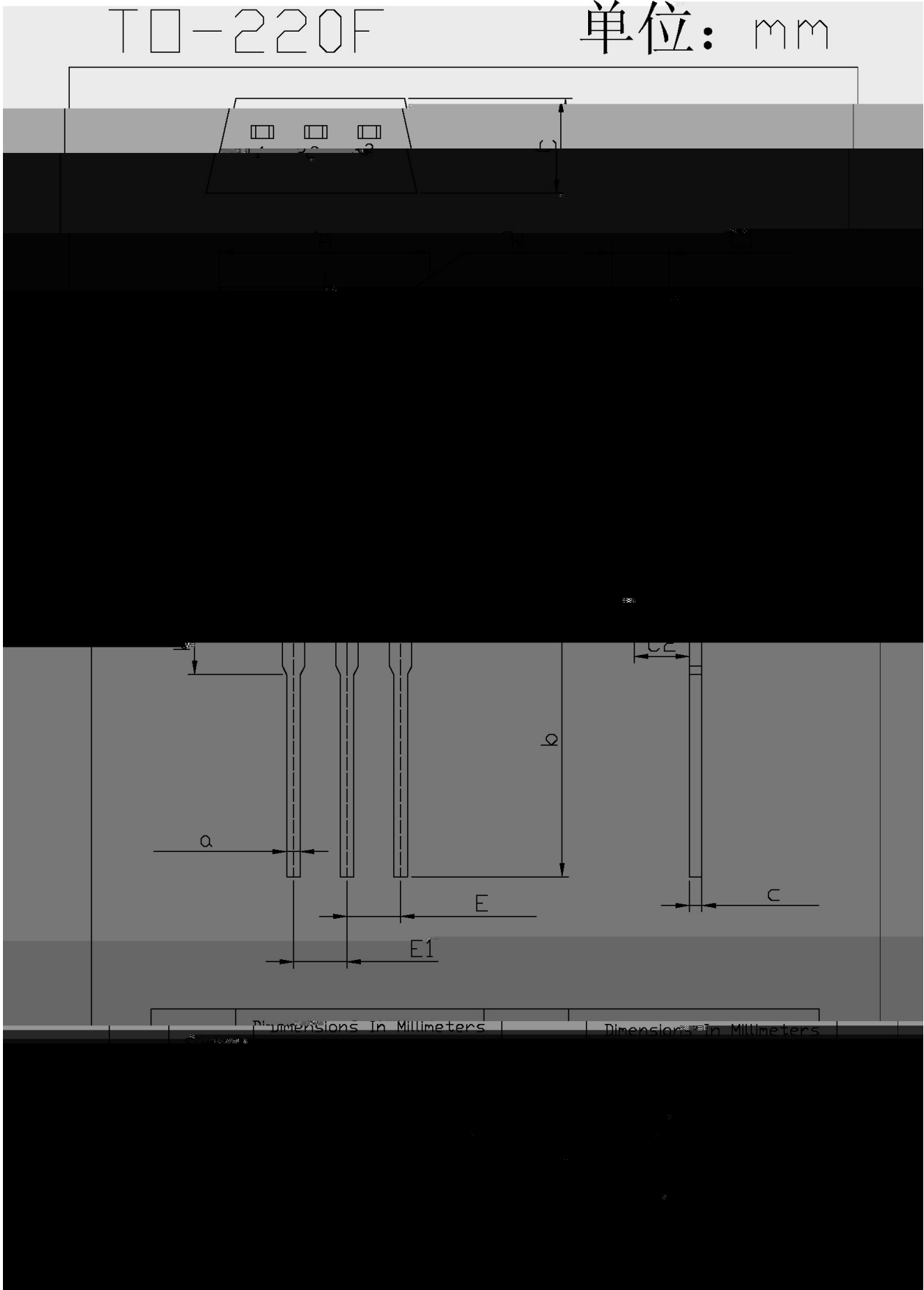
**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F=10A(T_j=25 )$			0.9	V
		$I_F=10A(T_j=125 )$			0.8	V
		$I_F=20A(T_j=25 )$			1.0	V
		$I_F=20A(T_j=125 )$			0.9	V
Instantaneous Reverse Current	$I_R$	$V_R=200V(T_j=25 )$			1.0	mA
		$V_R=200V(T_j=125 )$			50	mA
Voltage Rate of Change	dv/dt				10000	V/ $\mu$ s

/ Electrical Characteristic Curve



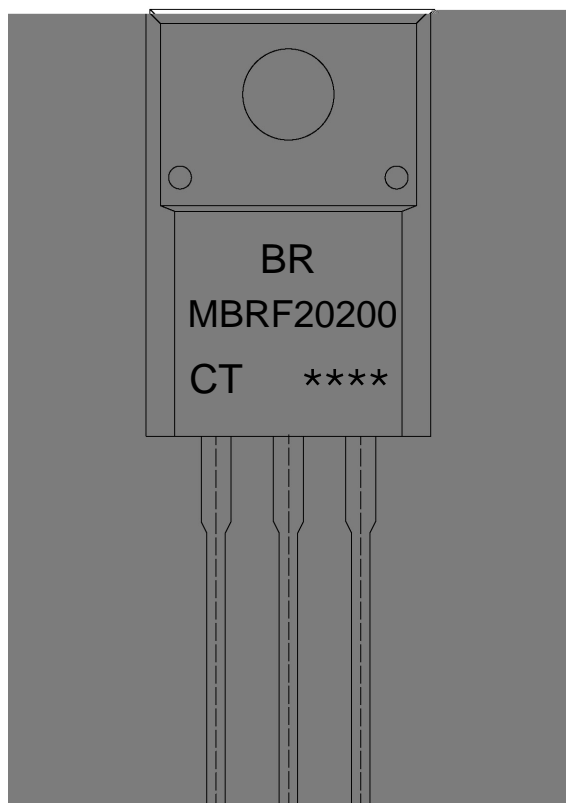
/ Package Dimensions



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## / Marking Instructions



Note:

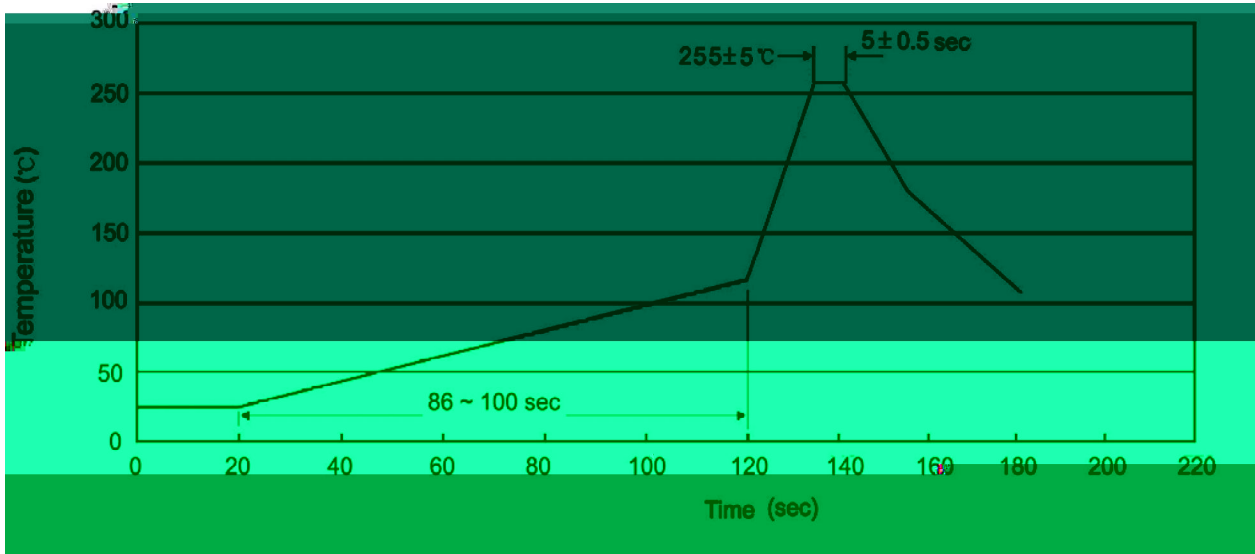
BR: Company Code

MBRF20200: Product Type.

CT: Internal Structure

\*\*\*\*: Lot No. Code, code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- |   |     |     |    |          |   |
|---|-----|-----|----|----------|---|
| 1 | 25  | 150 | 60 | 90sec;   | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 255 | 5   | 5  | 0.5sec;  | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 |     |     | 2  | 10 /sec. | 3. Cooling Speed: 2~10 /sec.            |

/ Resistance to Soldering Heat Test Conditions

270 5                      10 1 sec.                      Temp.:270±5                      Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195Bag