

/ Descriptions

TO-220F

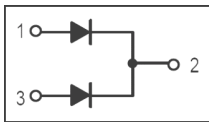
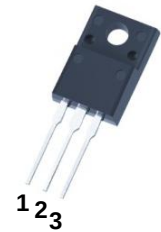
Schottky Diode in a TO-220F Plastic Package.

/ 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_{FE} Classifications & Marking

See Marking Instructions.

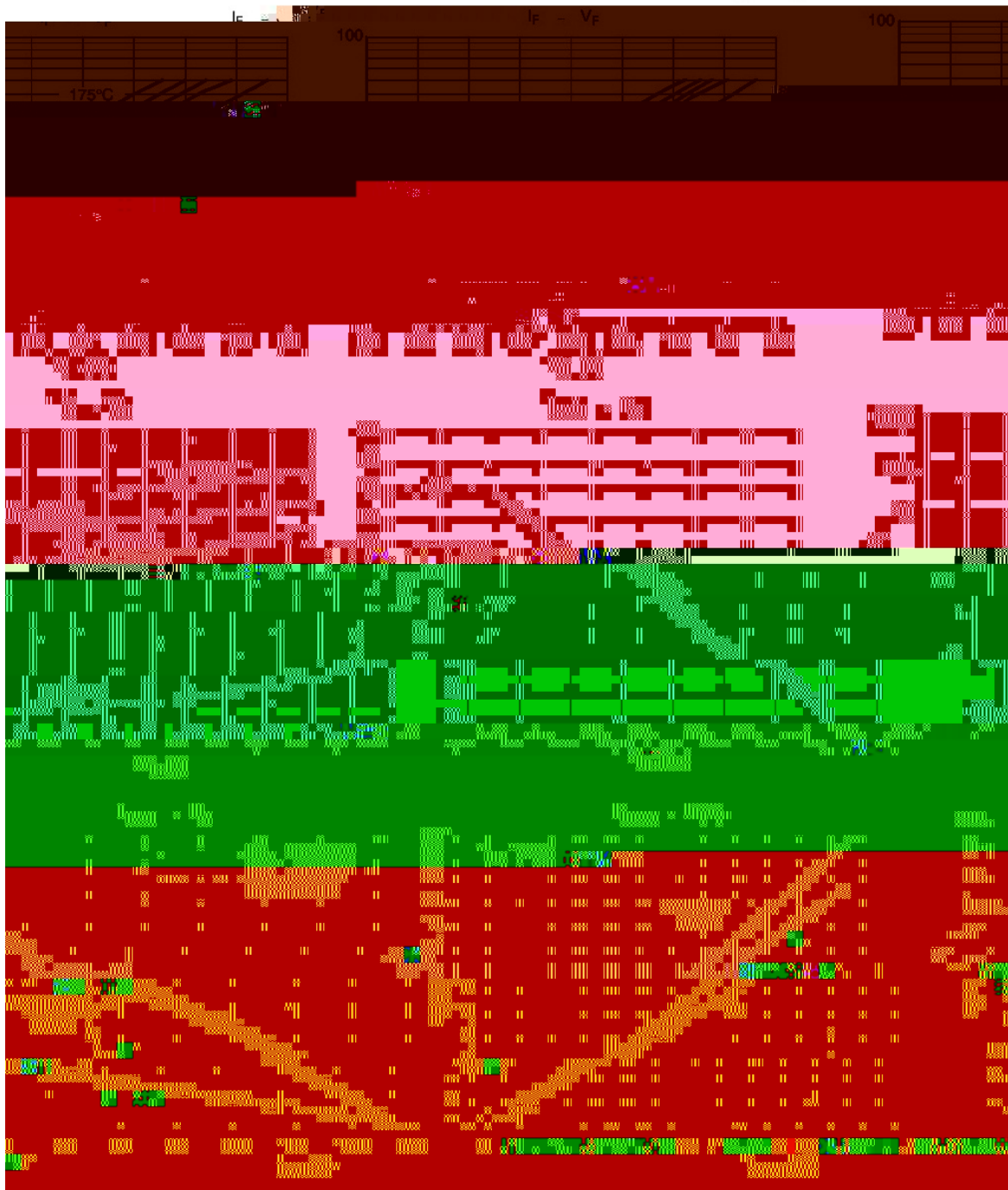
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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	$R_{\theta Jc}$	2.0	/W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-65 150	

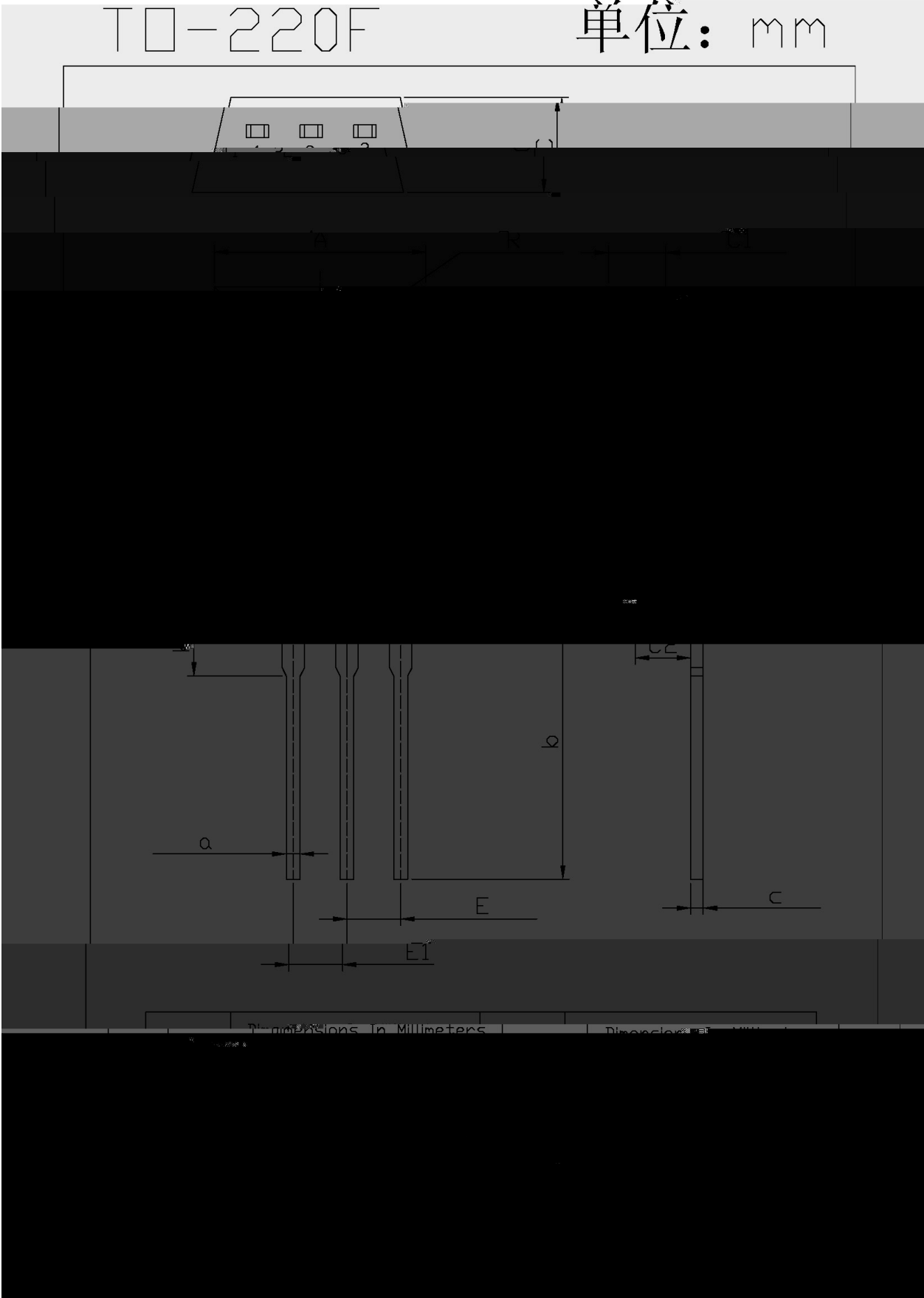
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

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

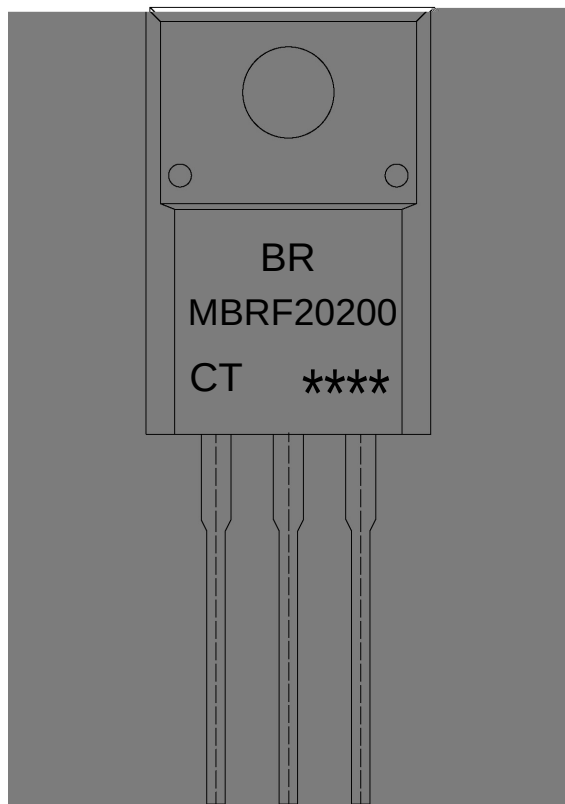
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MBRF20200

CT:

Note:

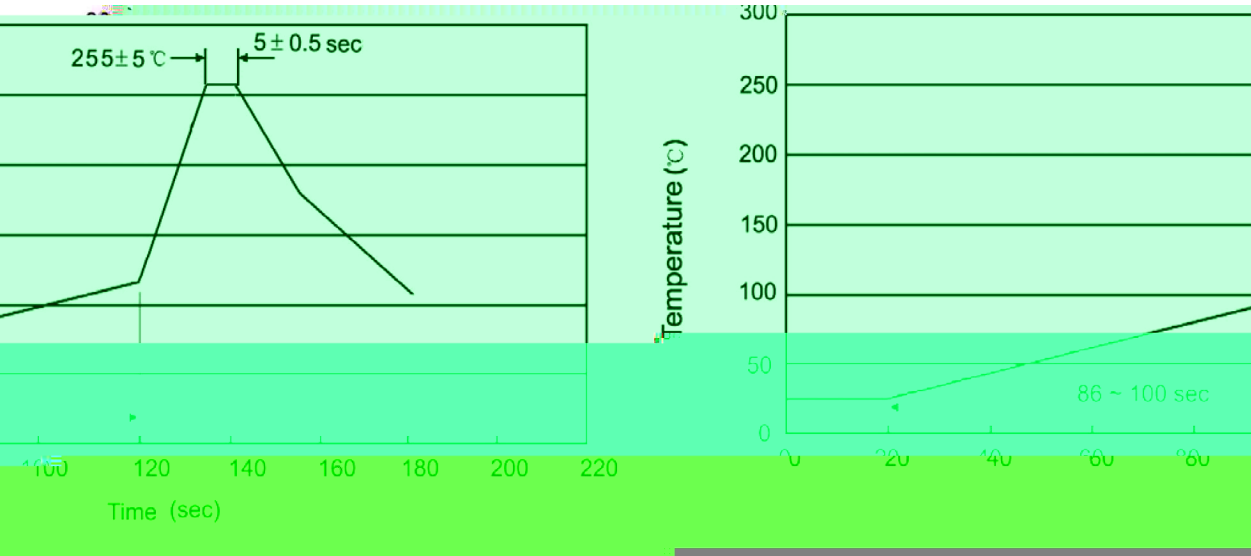
BR: Company Code

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;
- 2

255±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

, Time:60~90sec.
- 2.Peak Temp.:255±5

, Duration:5±0.5sec.
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 ³)		
	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	200×172×104	565×350×195