

/ Descriptions

TO-220F

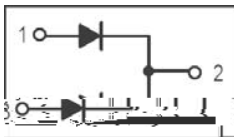
Schottky Barrier Diode in a TO-220F Plastic Package.

/ Features

Low power loss,high efficiency.

/ Applications

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

/ Equivalent Circuit**/ Pinning**

1 2 3
PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions

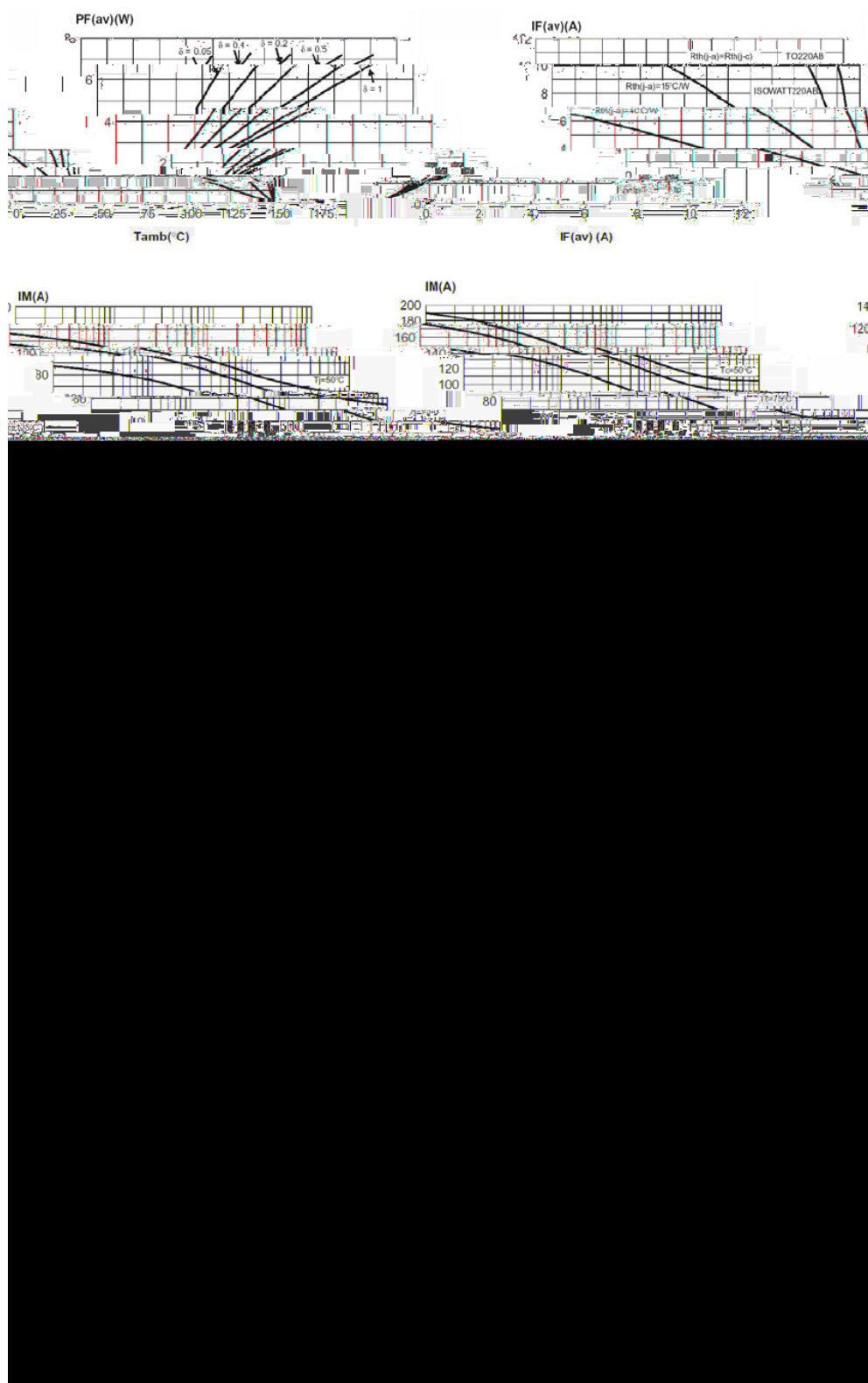
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Rectified Forward Current	I_F	30	A
Average Forward Current	$I_{F(AV)}$	10	A
Average Forward Current (Total)	$I_{F(AV)}$ total device	20	A
Non Repetitive Peak Surge Current	I_{FSM}	250	A
Repetitive peak reverse current	I_{RRM}	1.0	A
Non repetitive peak reverse current	I_{RSM}	3.0	A
Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.6	°C/W
Junction Temperature Range	T_j	175	°C
Storage Temperature Range	T_{stg}	-55~175	°C

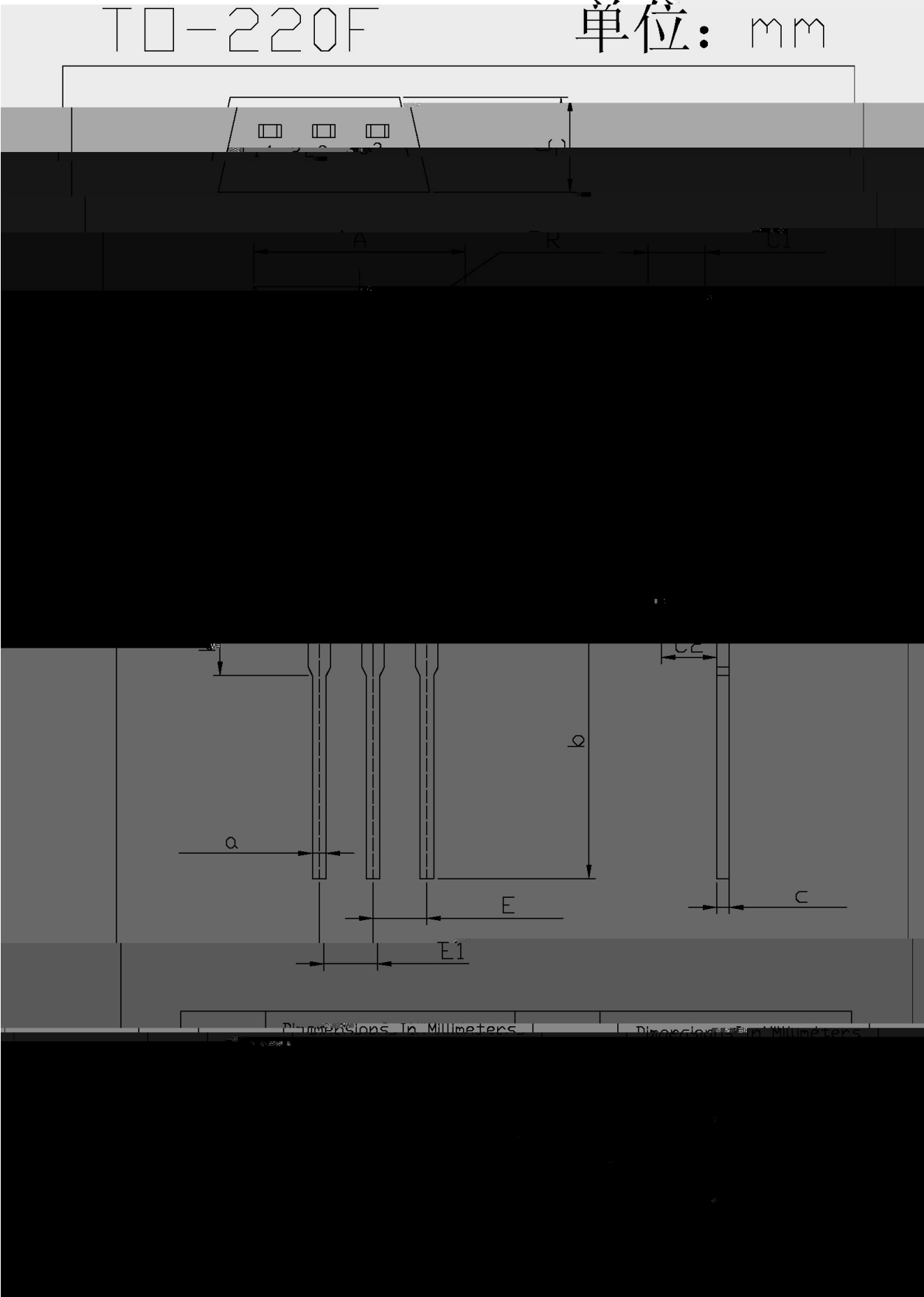
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=8A(T_c=25^{\circ}C)$			0.71	V
		$I_F=8A(T_c=125^{\circ}C)$		0.56	0.58	V
		$I_F=10A(T_c=25^{\circ}C)$			0.77	V
		$I_F=10A(T_c=125^{\circ}C)$		0.59	0.64	V
		$I_F=16A(T_c=25^{\circ}C)$			0.81	V
		$I_F=16A(T_c=125^{\circ}C)$		0.65	0.68	V
		$I_F=20A(T_c=25^{\circ}C)$			0.88	V
		$I_F=20A(T_c=125^{\circ}C)$		0.67	0.73	V
Instantaneous Reverse Current	I_R	$V_R=100V(T_c=25^{\circ}C)$			100	uA
		$V_R=100V(T_c=125^{\circ}C)$			6.0	mA
Voltage Rate of Change	dv/dt				10000	V/μs

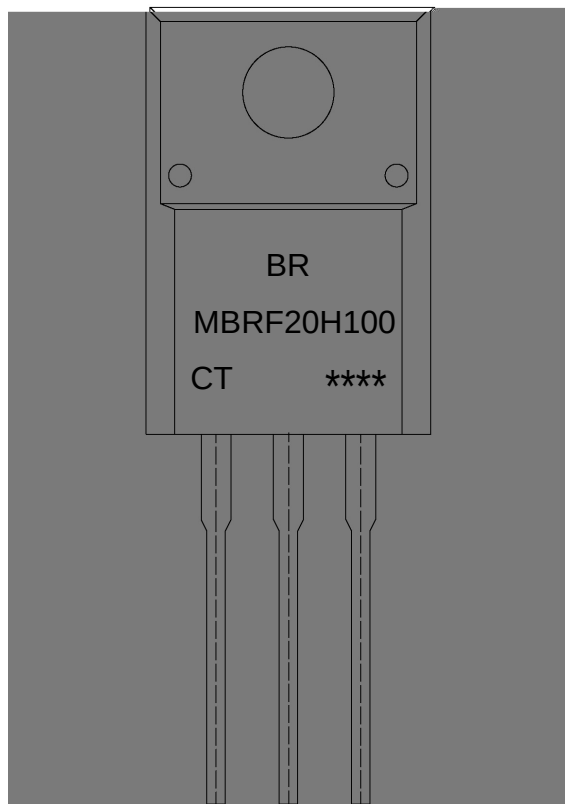
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MBRF20H100

CT:

Note:

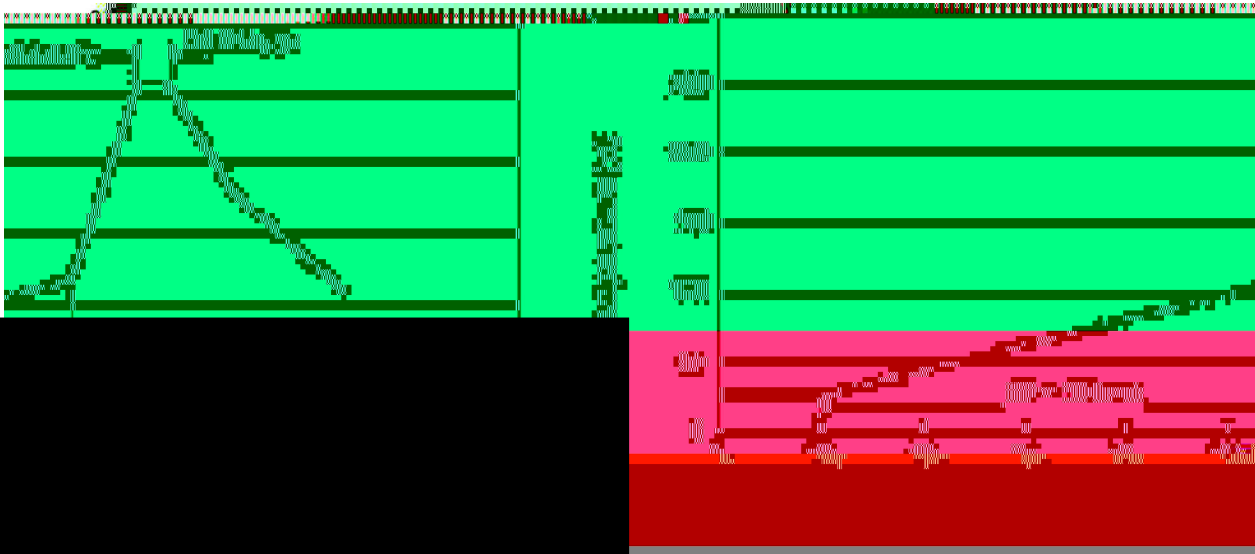
BR: Company Code

MBRF20H100: Product Type.

CT: Internal Structure

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

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



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

Heat Test Conditions

Temp.:270±5℃ Time:10±1 sec

/ 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	237×172×102	560×245×195U