

/ Descriptions

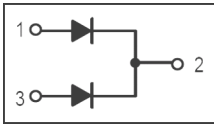
Schottky Barrier Diode in a TO-220F Plastic Package.

/ Features

Low power loss,high efficiency.

/ Applications

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

/ Equivalent Circuit**/ Pinning**

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}	60	V
Average Forward Current	$I_{F(AV)}$	20	A
Non Repetitive Peak Surge Current	I_{FSM}	150	A
Power Dissipation	P_D	2.0	W
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	5.0	/W
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	60	/W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10A(T_c=25^\circ\text{C})$			0.80	V
		$I_F=10A(T_c=125^\circ\text{C})$			0.70	V
		$I_F=20A(T_c=25^\circ\text{C})$			0.95	V
		$I_F=20A(T_c=125^\circ\text{C})$			0.85	V
Instantaneous Reverse Current	I_R	$T_A=25$			100	A
		$T_A=125$			30	mA
Repetitive Peak Reverse Current	I_{RRM}	$f=1.0\text{KHZ}$			0.5	A

/ Electrical Characteristic Curve

Figure 1. Forward Current Derating Curve

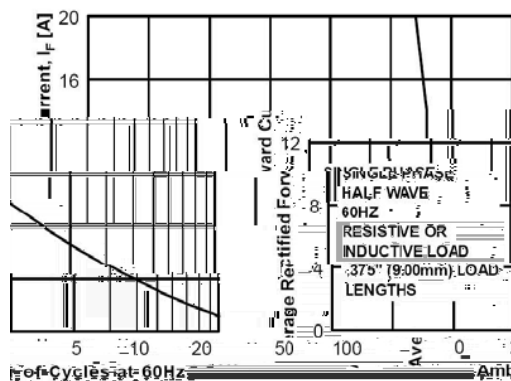
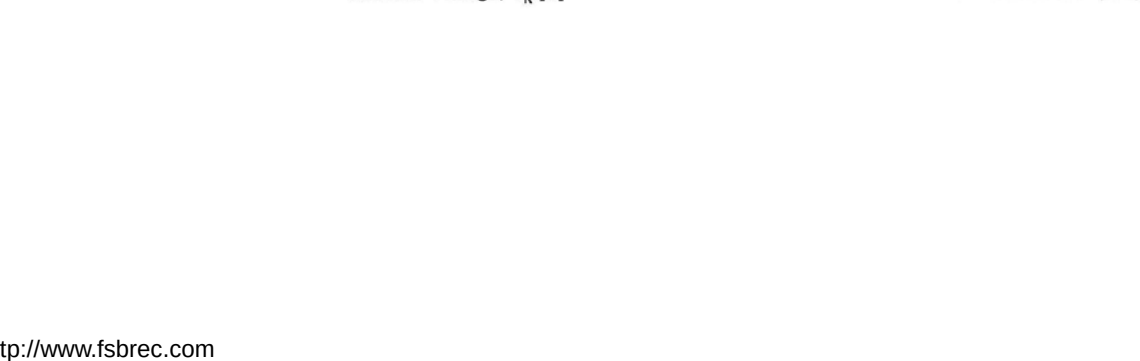
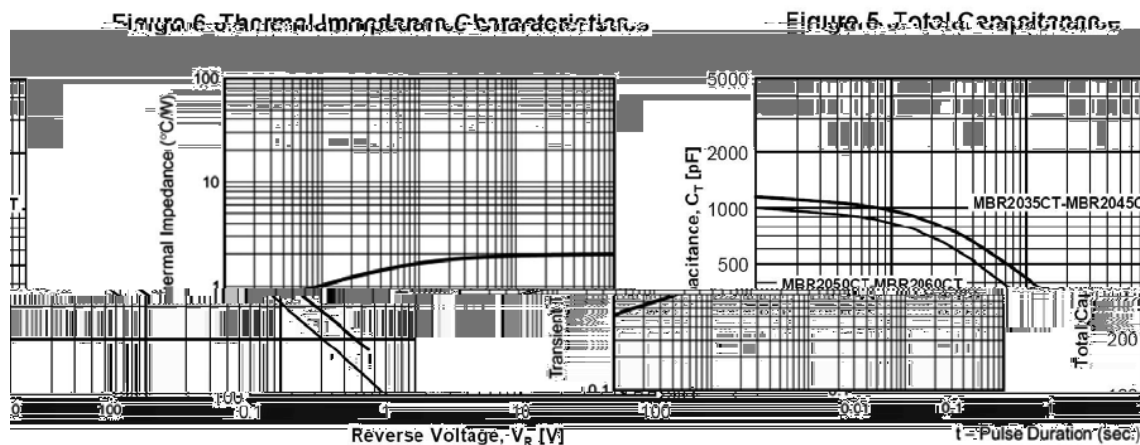
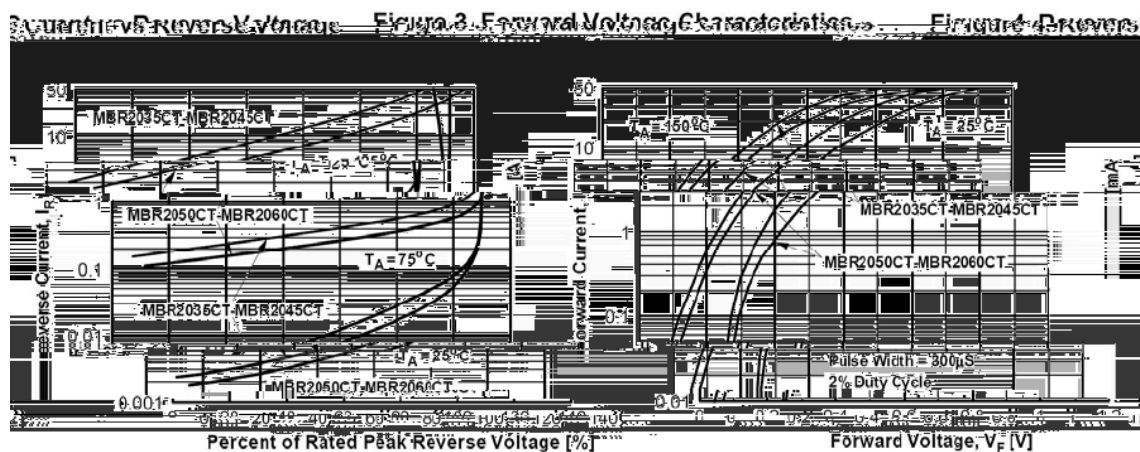
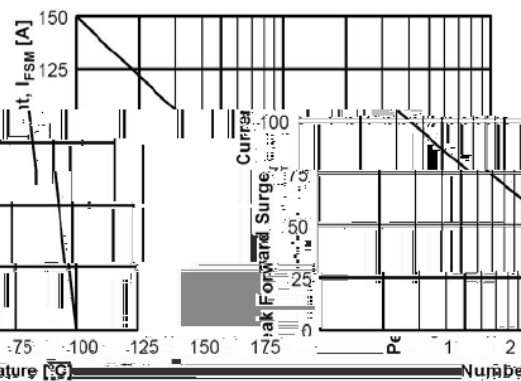
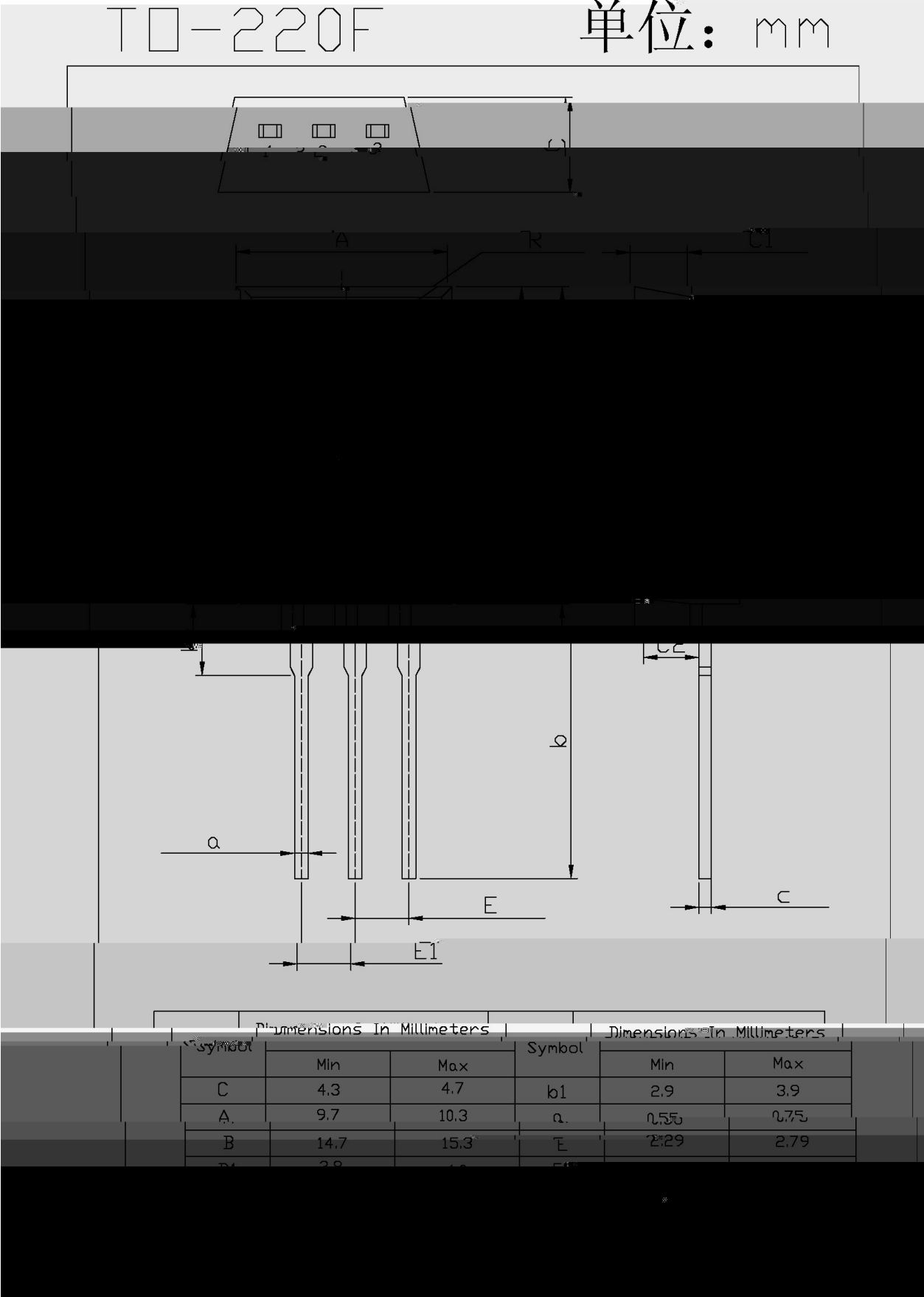


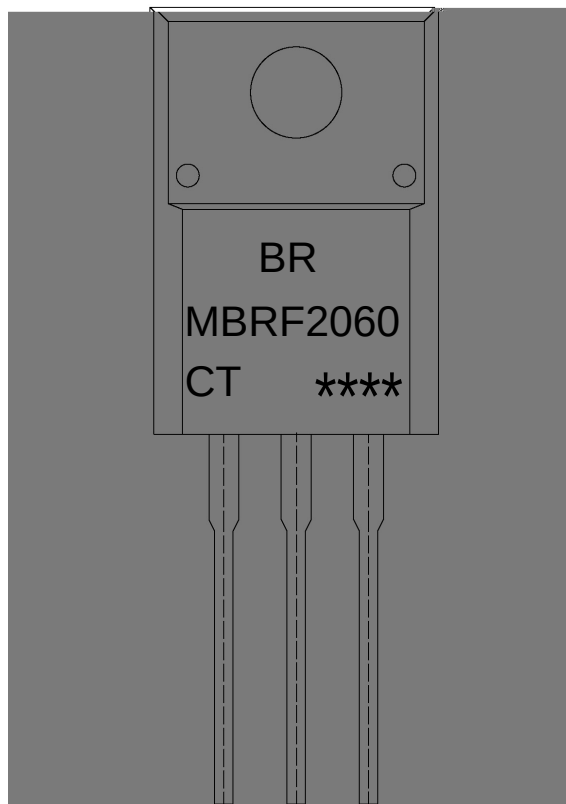
Figure 2. Non-Repetitive Surge Current



/ Package Dimensions



/ Marking Instructions



Note:

BR:

Company Code

MBRF2060:

Product Type.

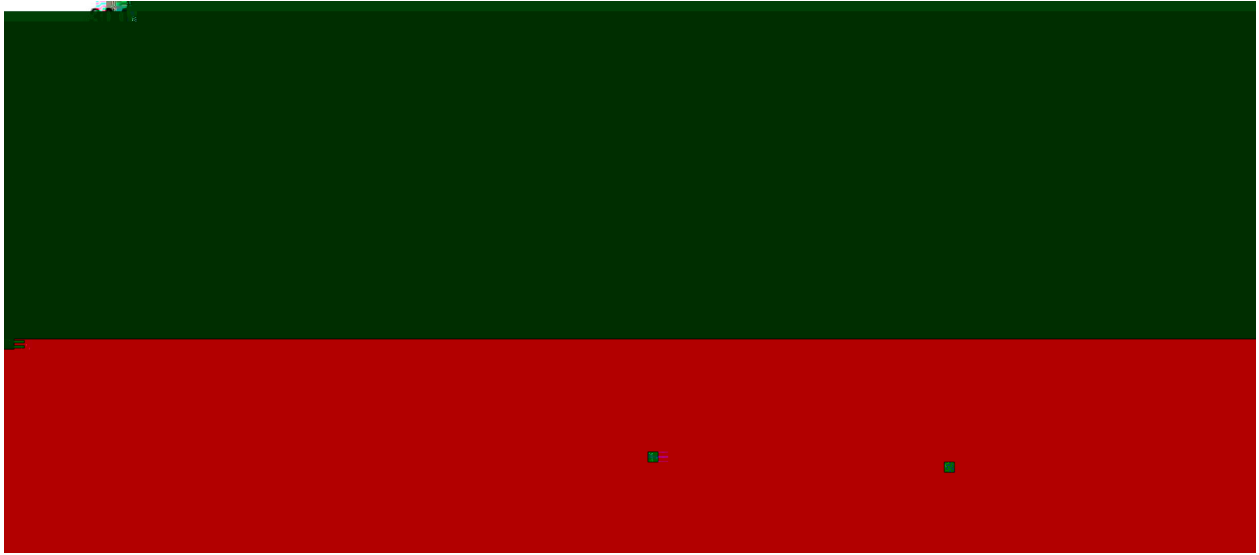
CT:

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
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/ 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	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices