

MBRF3060CT

Rev.F Mar.-2016

/ Descriptions

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

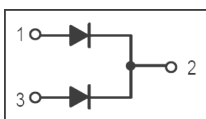
/ Features

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

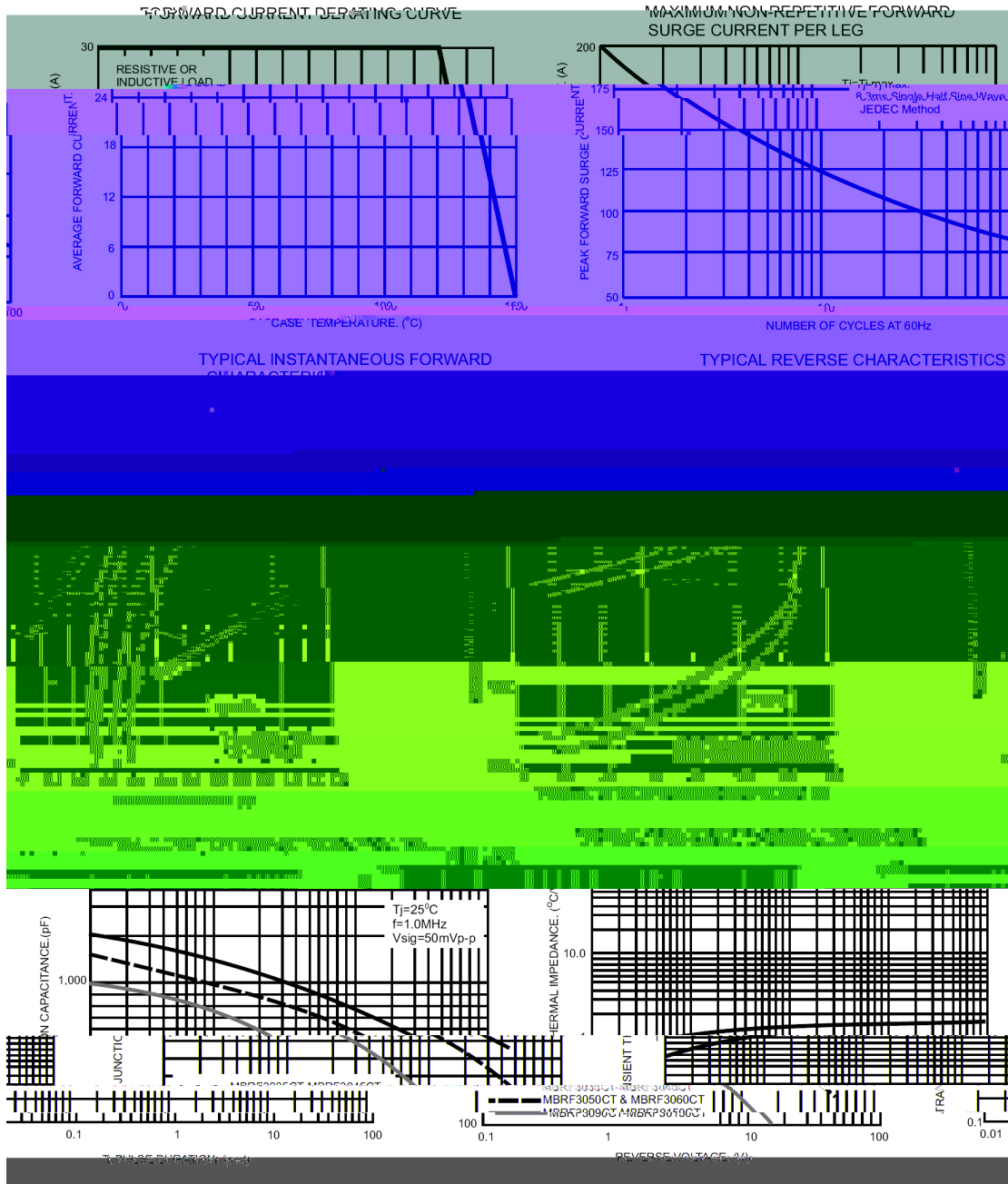
/ h_{FE} Classifications & Marking

See Marking Instructions

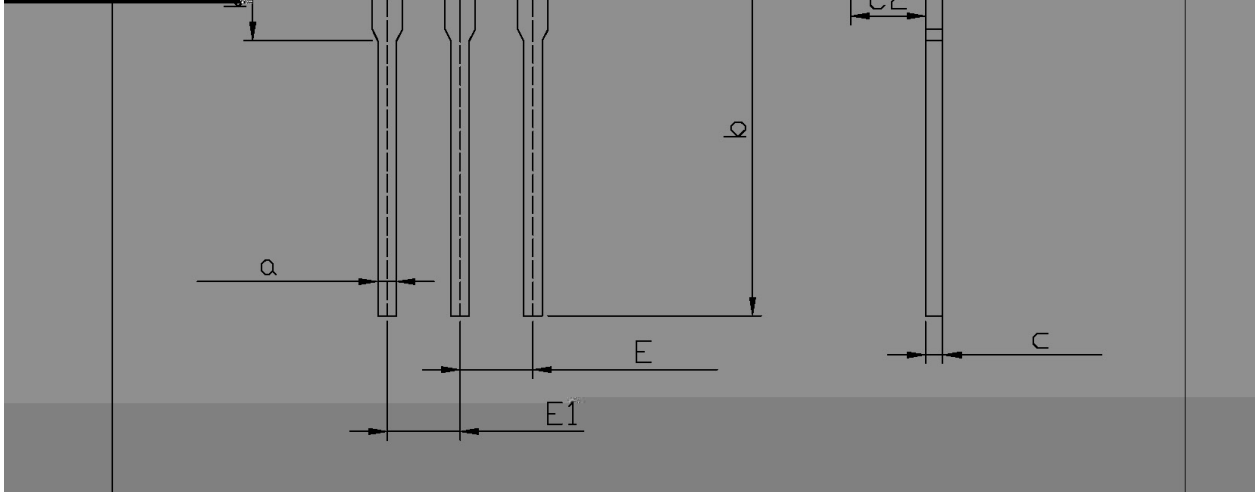
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
RMS forward current	V_{RMS}	42	V
DC Blocking Voltage	V_{DC}	60	V
Average Forward Current	$I_{F(AV)}$	15	A
Average Forward Current(total device)	$I_{F(AV)}$ total device	30	A
Non Repetitive Peak Surge Current	I_{FSM}	200	A
Instantaneous Reverse Current	I_{FRM}	30	A
Peak Repetitive Reverse Current	I_{RRM}	0.5	A
Thermal Resistance Junction to Case	R_{Jc}	1.0	/W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 15A(T_c = 25^\circ C)$			0.75	V
		$I_F = 15A(T_c = 125^\circ C)$			0.65	V
		$I_F = 30A(T_c = 25^\circ C)$			0.95	V
		$I_F = 30A(T_c = 125^\circ C)$			0.85	V
Instantaneous Reverse Current	I_R	$T_c = 25$			0.2	mA
		$T_c = 125$			15	mA

/ Electrical Characteristic Curve

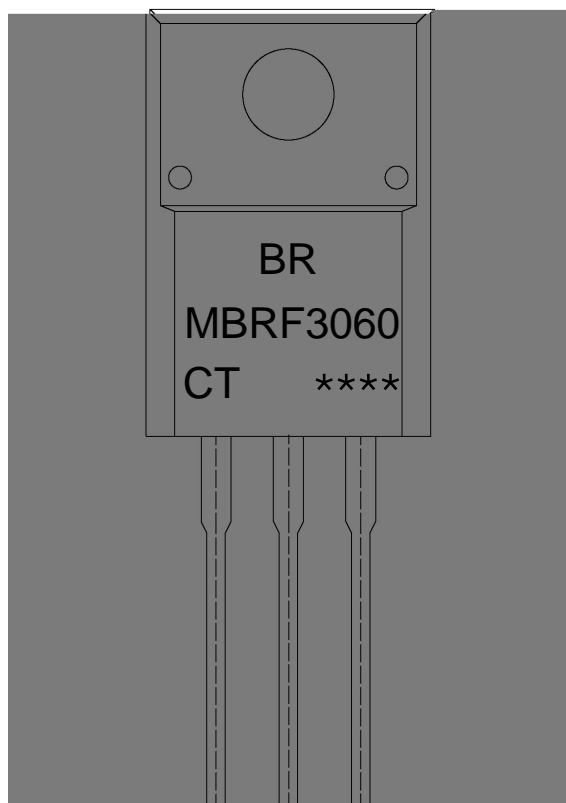


/ Package Dimensions



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
b	4.3	4.7	CE	0.9	0.9
a	9.7	10.3	c	0.5	0.75
E	10.0	10.5	E1	1.2	1.5

/ Marking Instructions



Note:

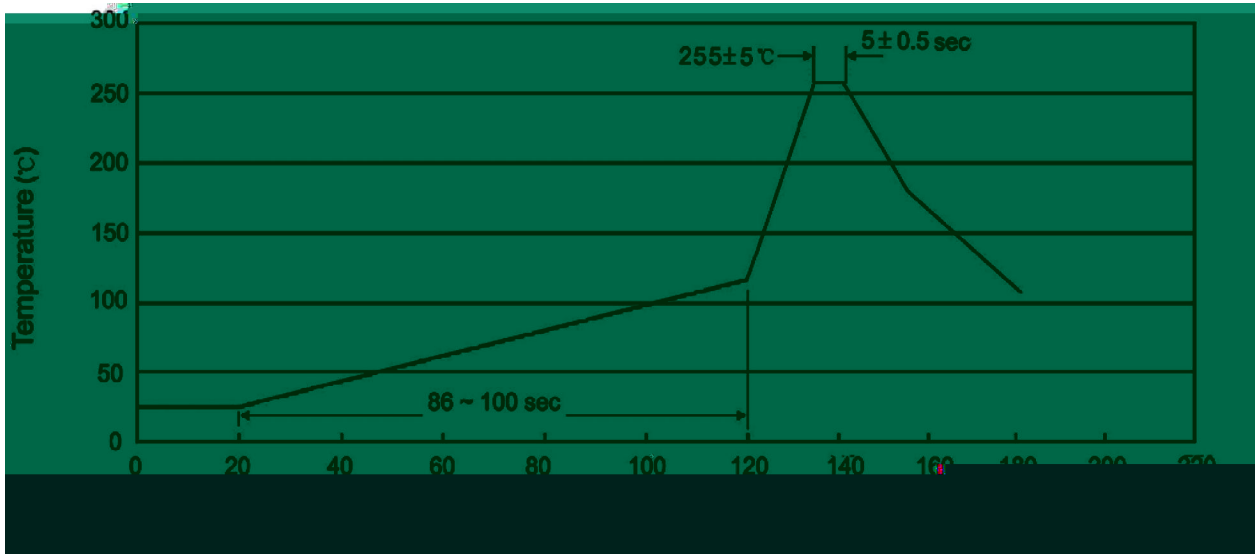
BR: Company Code

MBRF3060: 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 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