

MBRP20200CT

Rev.F Mar.-2016



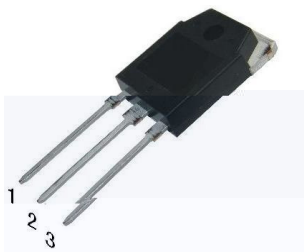
DATA SHEET

TO-3P

Schottky Barrier Diode in a TO-3P Plastic Package.

Low power loss, high efficiency.

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



PIN1 Anode

PIN 2 Cathode

PIN 3 Anode

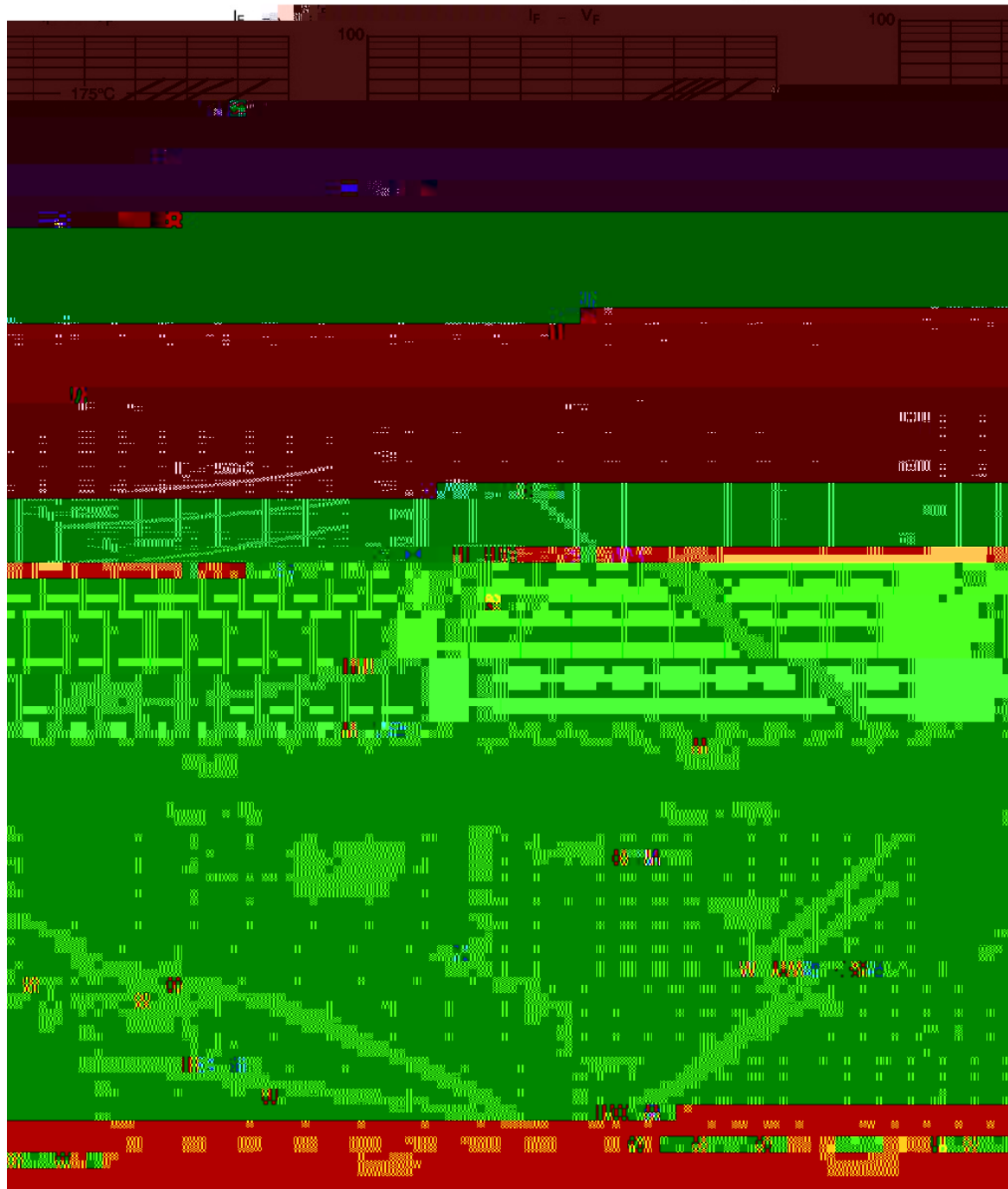
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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 Surge Current	I_{RRM}	1.0	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	1.25	/W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-65 150	

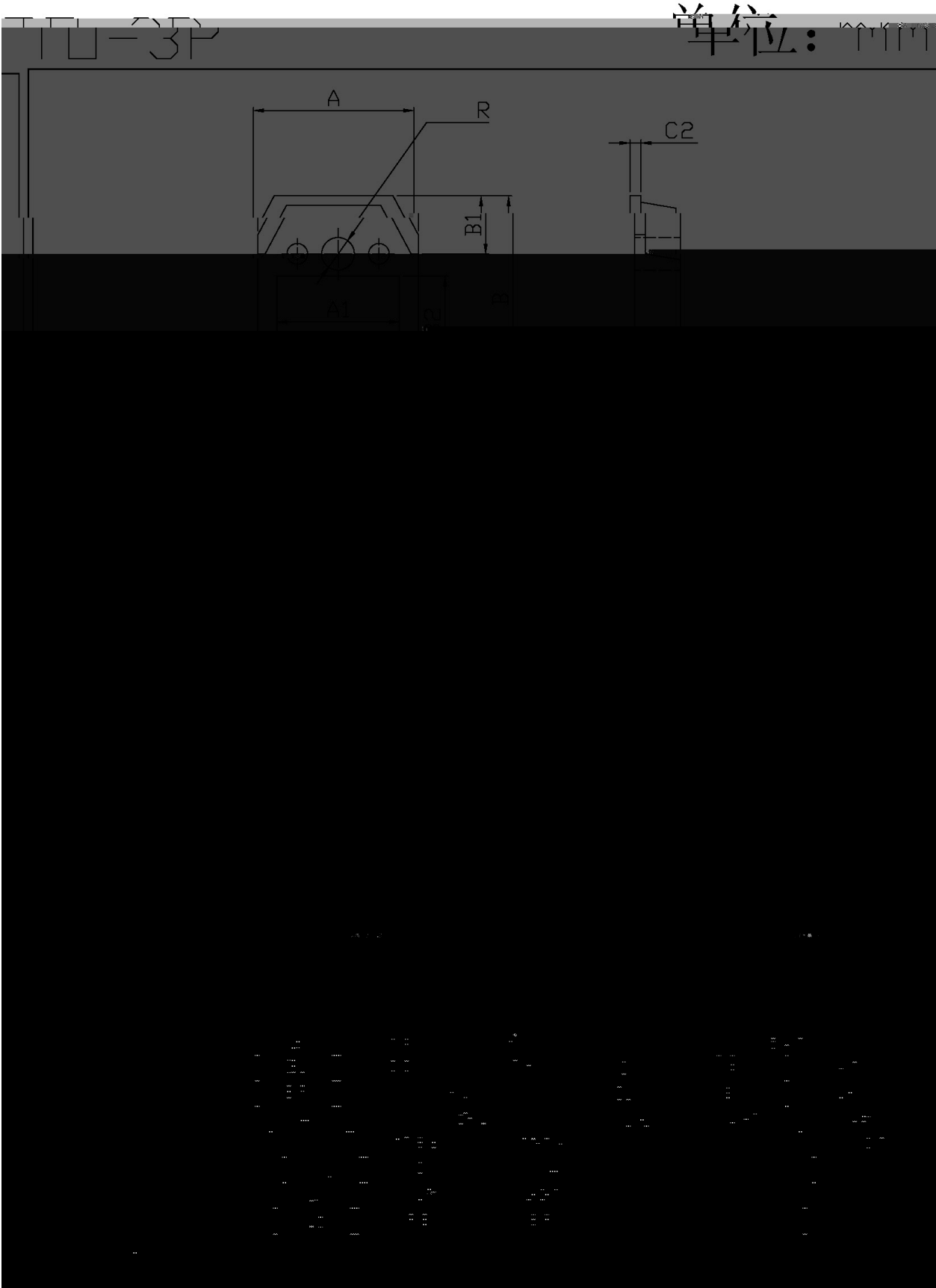
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10A(T_j=25^\circ\text{C})$		0.8	0.9	V
		$I_F=10A(T_j=125^\circ\text{C})$		0.66	0.8	V
		$I_F=20A(T_j=25^\circ\text{C})$		0.89	1.0	V
		$I_F=20A(T_j=125^\circ\text{C})$		0.76	0.9	V
Instantaneous Reverse Current	I_R	$V_R=200V(T_j=25^\circ\text{C})$			1.0	mA
		$V_R=200V(T_j=125^\circ\text{C})$		0.4	50	mA
Voltage Rate of Change	dv/dt				10000	V/ μs

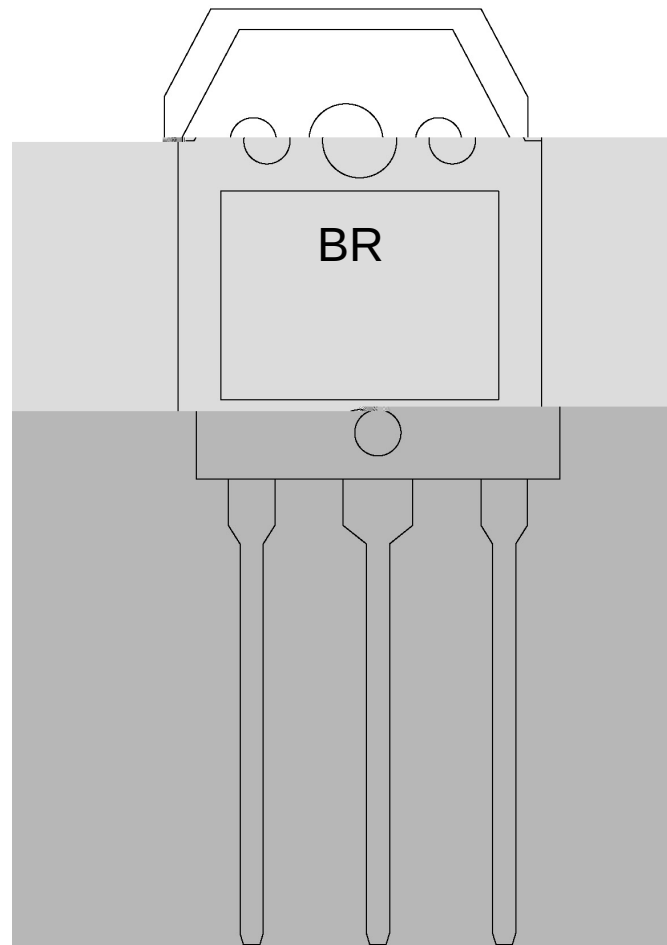
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MBR20200

CT:

Note:

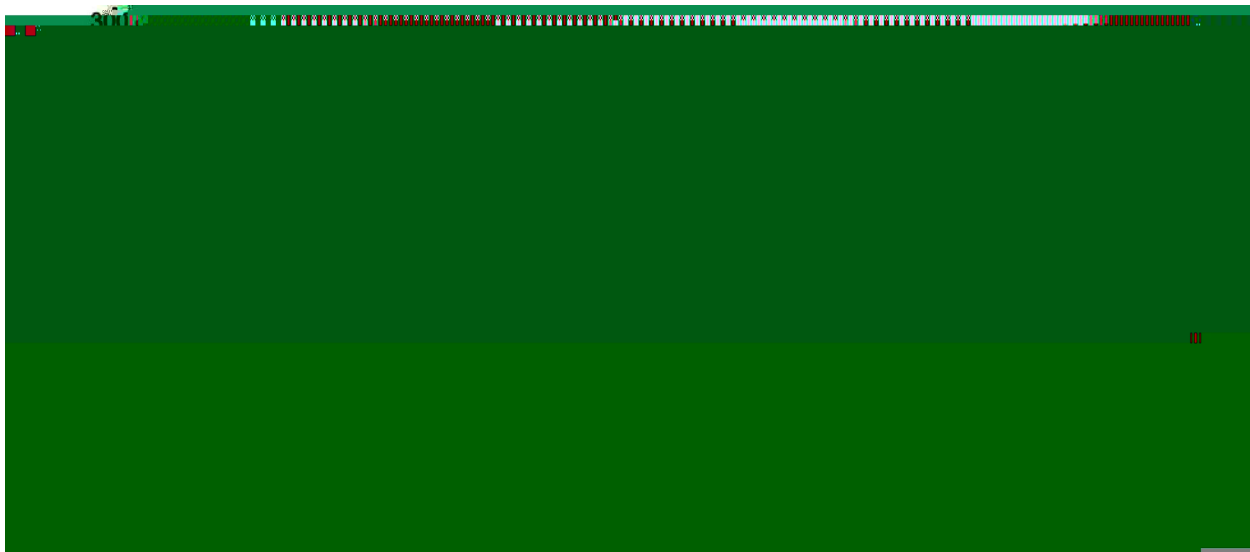
BR: Company Code

MBR20200 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.

/ TUBE

Package Type	Units					Dimension		(unit mm ³)
								× ×

/ Notices