

BRMBR30200CTRA

Rev. B Jul.-2018

/ Descriptions

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

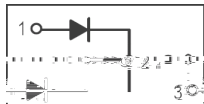
/ Features

Low power loss, high efficiency.

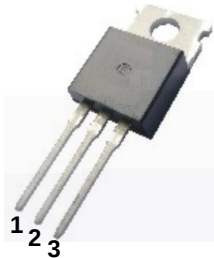
/ Applications

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
Average Rectified Forward Current	$I_{F(AV)}$	15	A
	$I_{F(AV) \text{ total}}$	30	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	320	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.2	/W
Junction Temperature Range	T_j	175	
Storage Temperature Range	T_{stg}	-40 175	

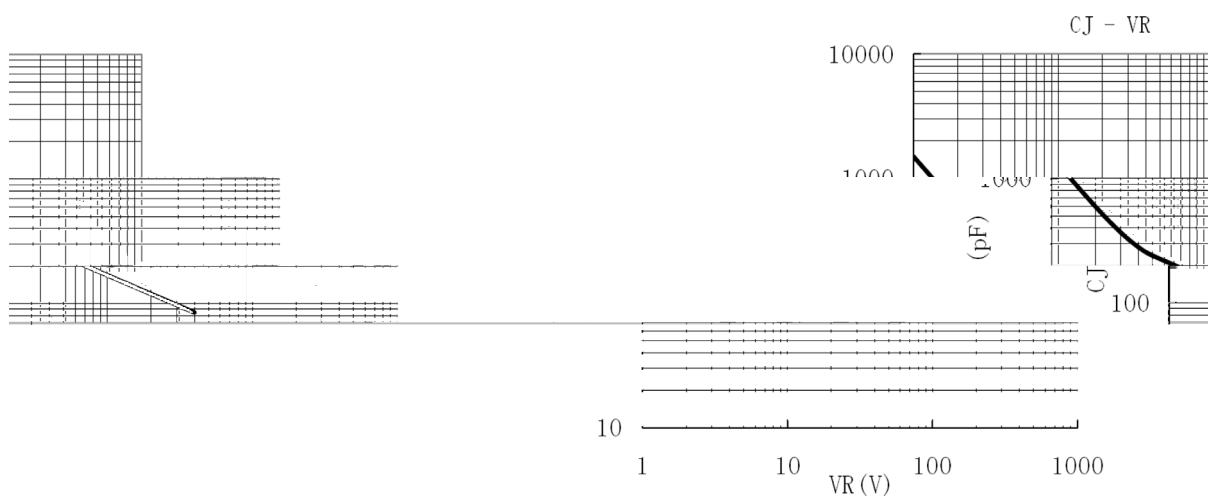
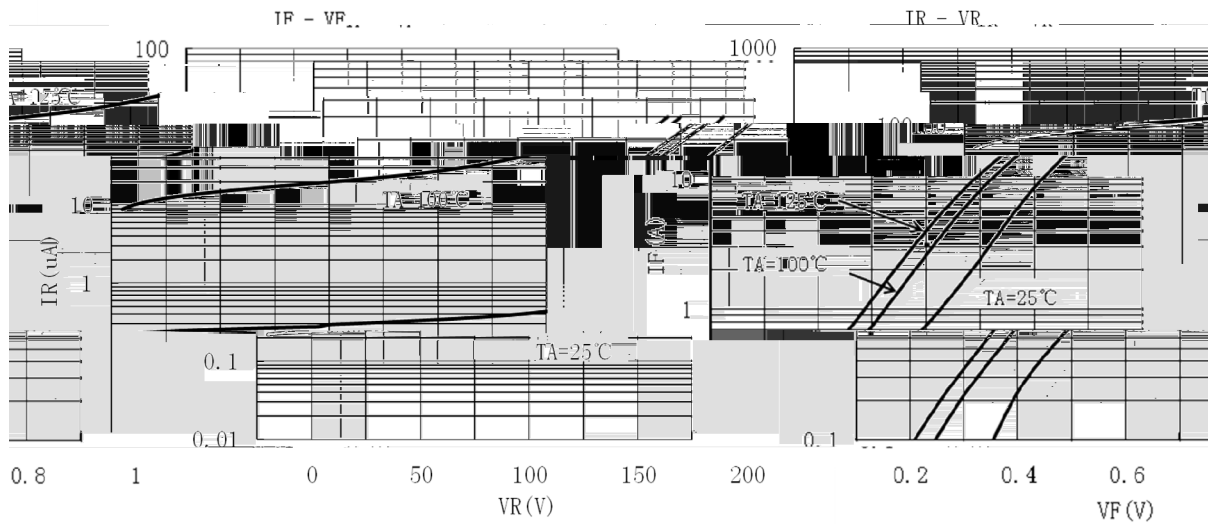
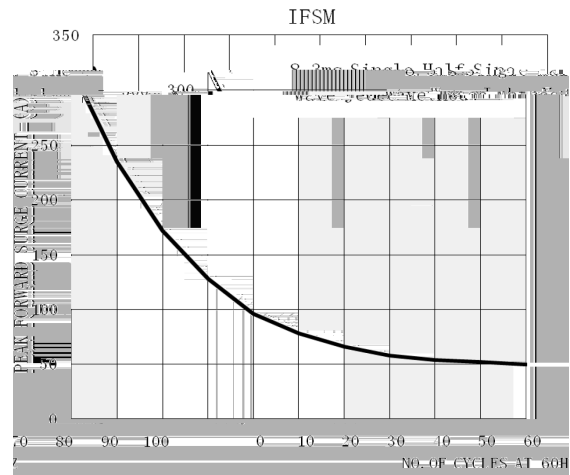
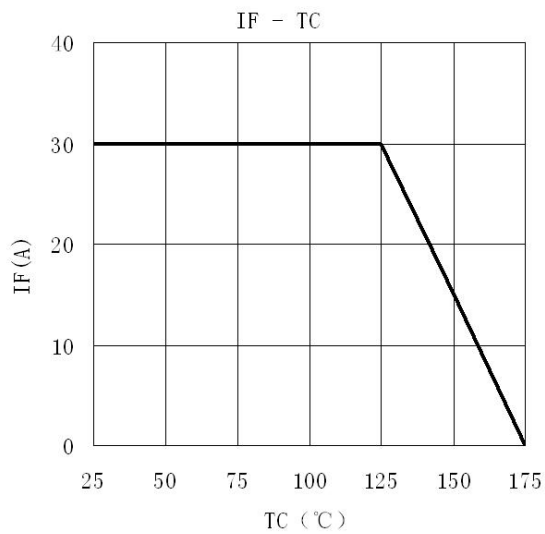
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{BR R}$	$I_R=1\text{mA}(T_a=25^\circ\text{C})$	200			V
Forward Voltage	V_F	$I_F=15\text{A}(T_a=25^\circ\text{C})$		0.86	0.92	V
		$I_F=15\text{A}(T_a=125^\circ\text{C})$			0.78	V
		$I_F=20\text{A}(T_a=25^\circ\text{C})$		0.89	0.95	V
		$I_F=20\text{A}(T_a=125^\circ\text{C})$			0.82	V
Instantaneous Reverse Current	I_R Note 1	$V_R=200\text{V}(T_a=25^\circ\text{C})$			100	μA
		$V_R=200\text{V}(T_a=125^\circ\text{C})$			5	mA

/Notes

1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

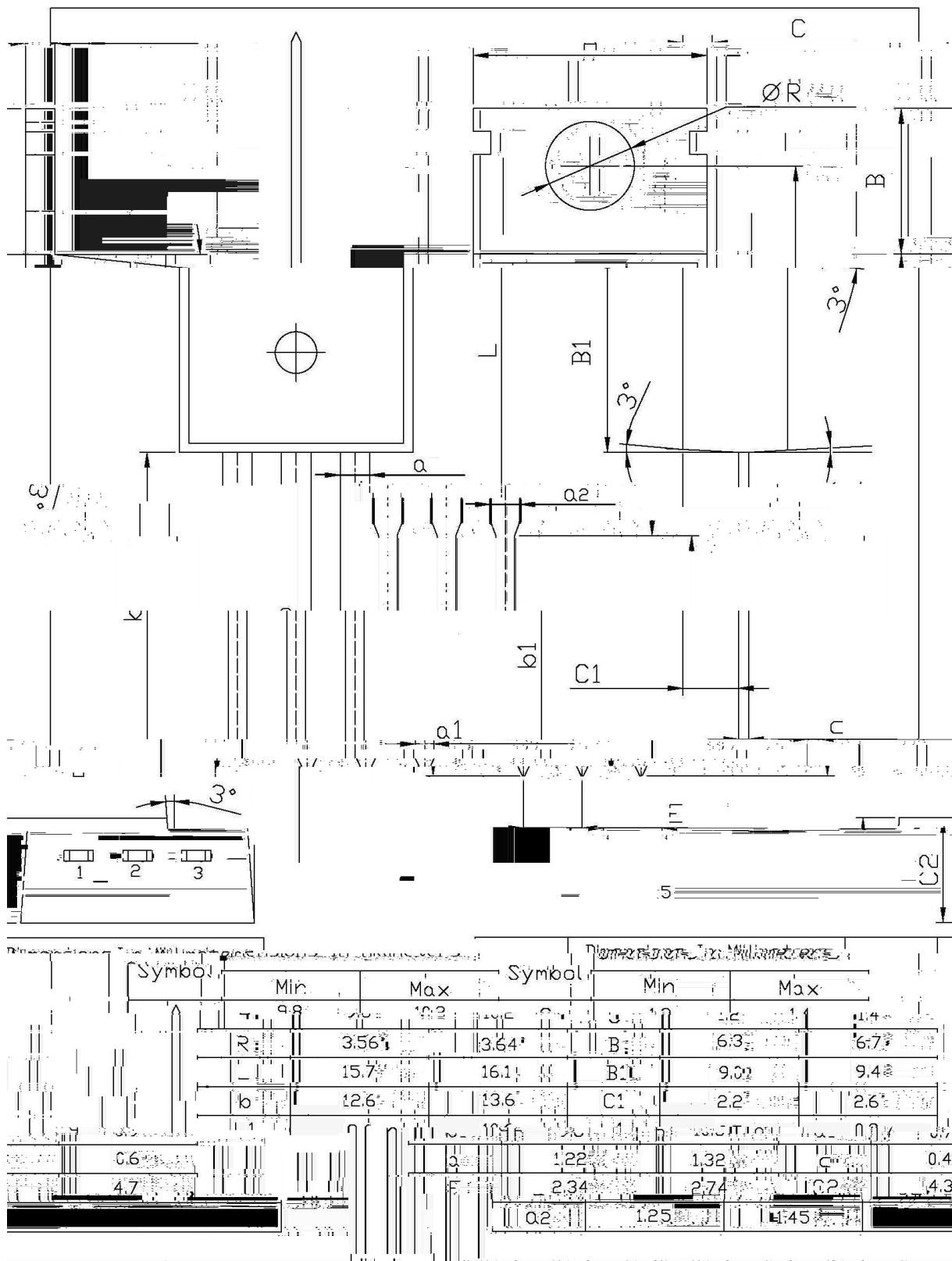




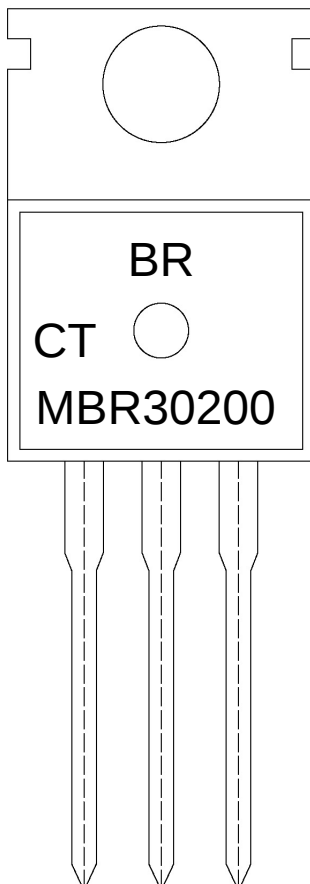
/ Package Dimensions

TQ-220

单位: mm



/ Marking Instructions



BR

MBR30200

CT:

Note:

BR:

Company Code

MBR30200

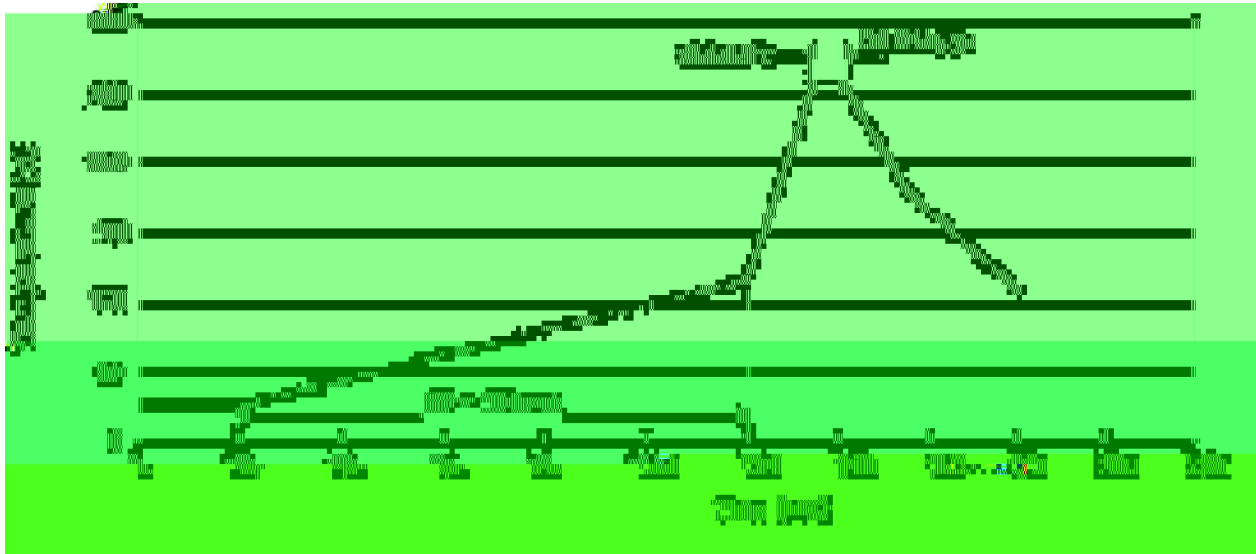
Product Type.

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)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只套管	套管盒	只盒	盒箱	只箱	套管	盒	箱

/ Notices