

# MBRB10200CT

Rev.G Dec.-2017

## / Descriptions

TO-263

Schottky Diode in a TO-263 Plastic Package.

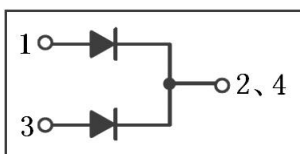
## / Features

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 4 Cathode

PIN 3 Anode

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	$V_{RRM}$ $V_{RWM}$ $V_{RM}$	200	V
DC Blocking Voltage	$V_{R(RMS)}$	140	V
Average forward rectified Current	$I_{F(AV)}$	2x5	A
Non Repetitive Peak Surge Current	$I_{FSM}$	120	A
Junction Temperature Range	$T_{j MAX}$	150	°C
Storage Temperature Range	$T_{stg}$	-65 150	°C

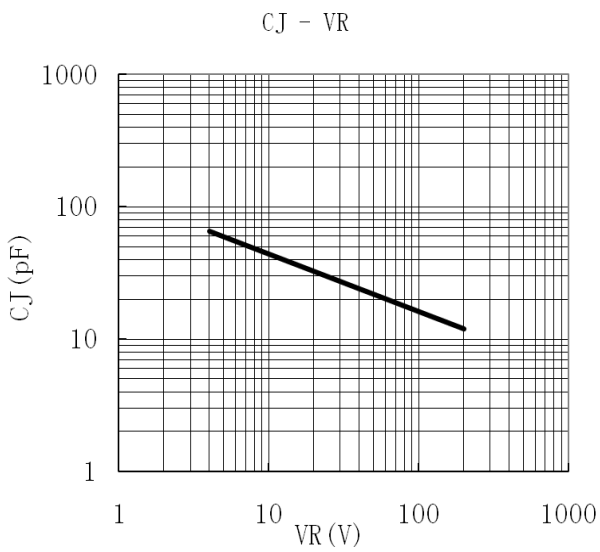
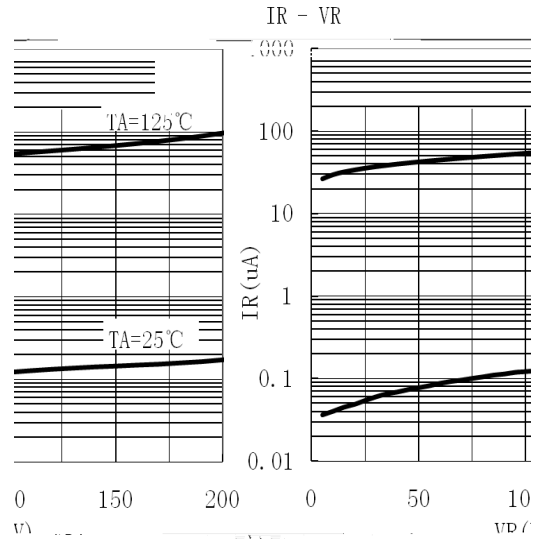
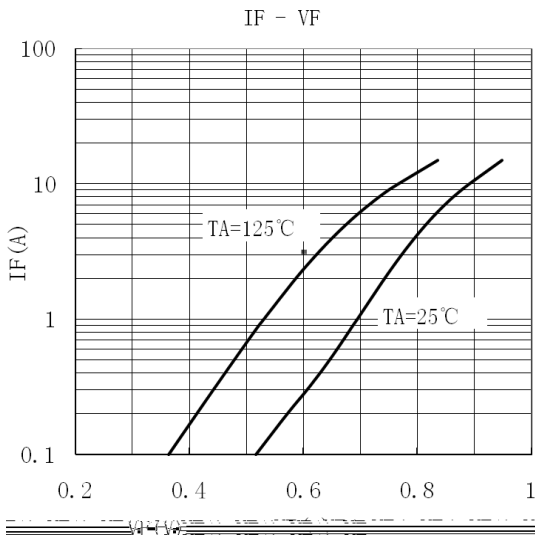
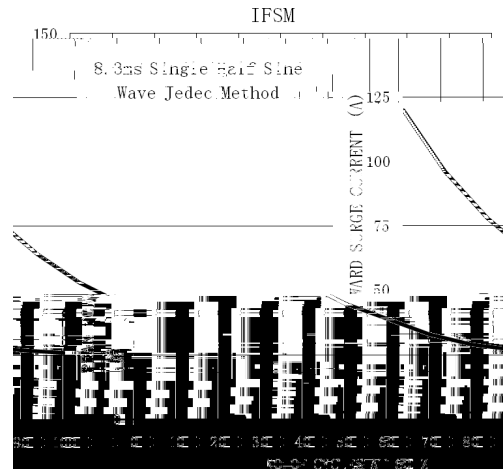
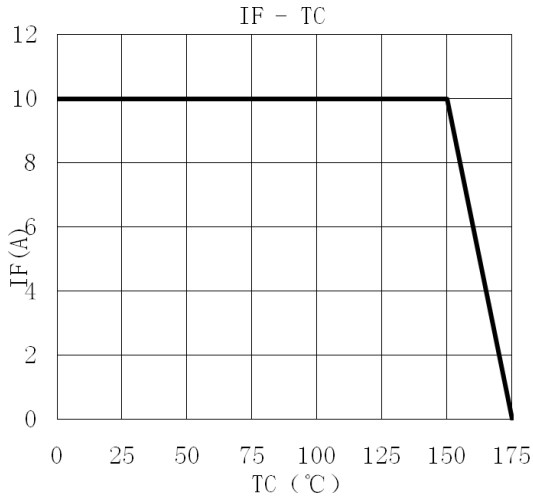
**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	$I_R = 0.3mA$	200			V
Peak Forward Voltage	$V_{FM}$	$I_F = 5.0A$ $T_j = 25^\circ C$		0.80	0.85	V
		$I_F = 5.0A$ $T_j = 125^\circ C$		0.68	0.75	V
		$I_F = 10A$ $T_j = 25^\circ C$		0.88	0.95	V
		$I_F = 10A$ $T_j = 125^\circ C$		0.77	0.85	V
Instantaneous Reverse Current	$I_R$ Note 1	$V_R = 200V$ $T_j = 25$			10	uA
		$V_R = 150V$ $T_j = 125$			1	mA
		$V_R = 200V$ $T_j = 125$			5	mA

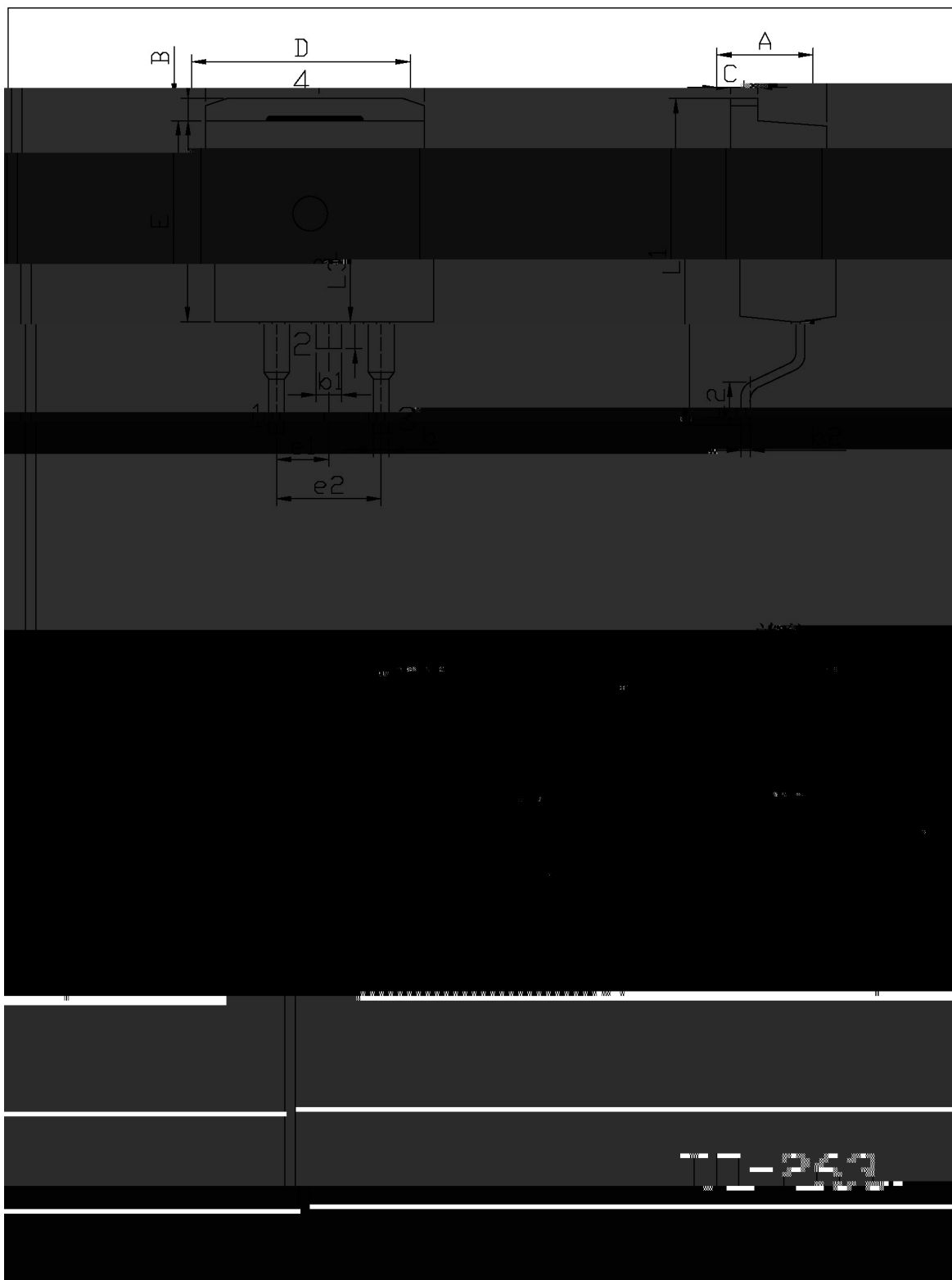
/Notes

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

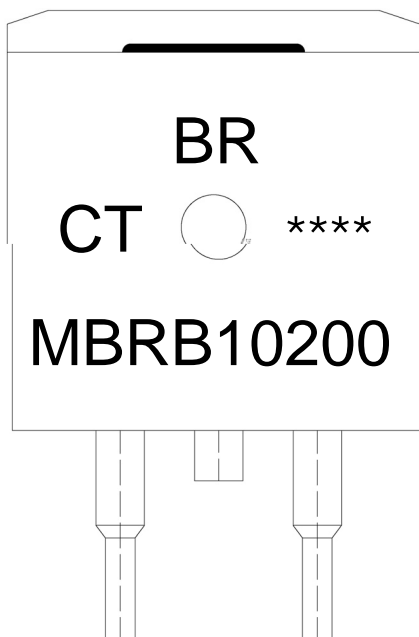
**/ Electrical Characteristic Curve**



**/ Package Dimensions**



**/ Marking Instructions**



BR

MBRB10200

CT:

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Note:

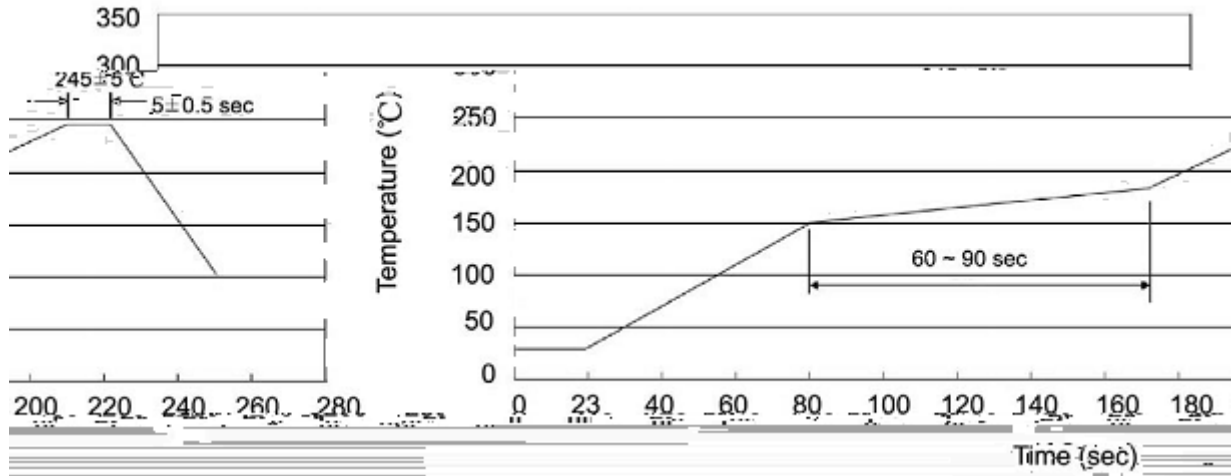
BR: Company Code

MBRB10200 Product Type.

CT: Internal Structure

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

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Note:

- 1            25 150            60 90sec;            1.Preheating:25~150 , Time:60~90sec.
- 2            245±5            5±0.5sec;            2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3            2 10 /sec.            3. Cooling Speed: 2~10 /sec.

**/ Resistance to Soldering Heat Test Conditions**

260±5            10±1 sec.            Temp.:260±5°C            Time:10±1 sec

**/ Packaging SPEC.**

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-263	800	1	800	6	48,000	13 ×24	360×360×50	385×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

**/ Notices**