

MBRB10200CT

Rev.G Dec.-2017

/ Descriptions

TO-263

Schottky Diode in a TO-263 Plastic Package.

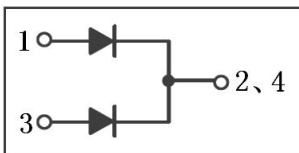
/ Features

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_{FE} 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	$I_{F(AV)}$	2×5	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)

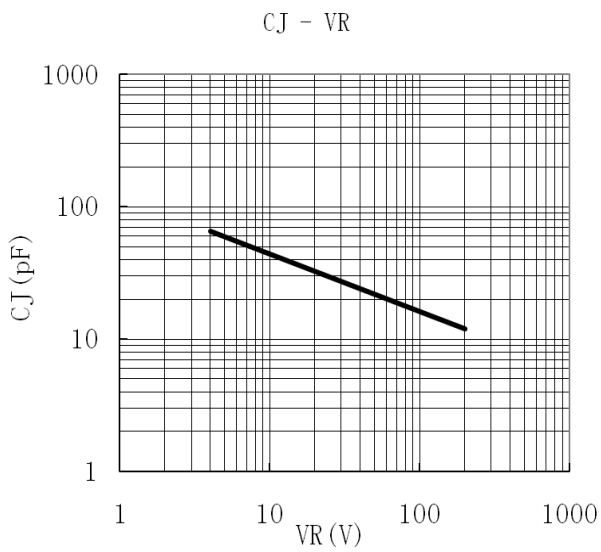
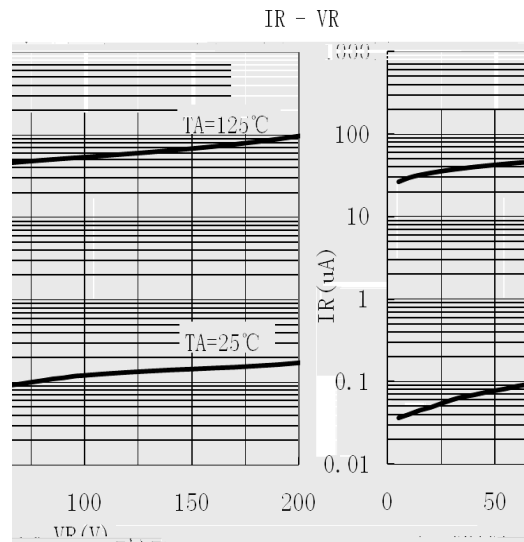
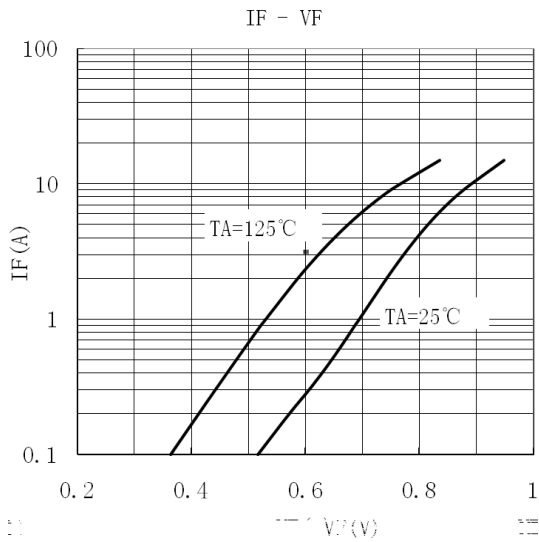
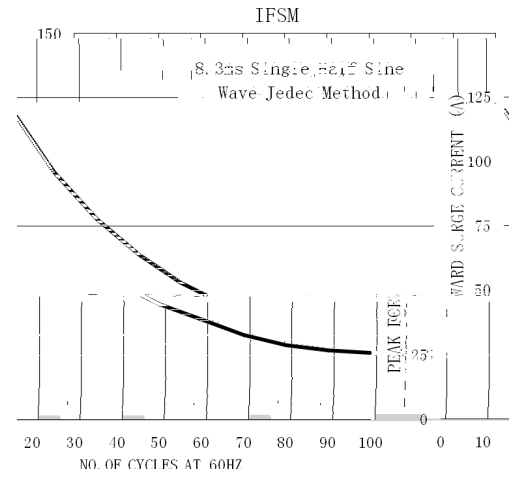
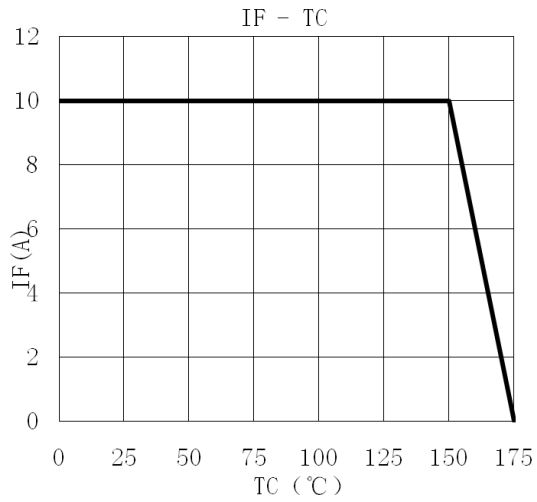
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	$I_R=0.3mA$	200			V
Peak Forward Voltage	V_{FM}	$I_F=5.0A$ $T_J=25^{\circ}C$		0.80	0.85	V
		$I_F=5.0A$ $T_J=125^{\circ}C$		0.68	0.75	V
		$I_F=10A$ $T_J=25^{\circ}C$		0.88	0.95	V
		$I_F=10A$ $T_J=125^{\circ}C$		0.77	0.85	V
Instantaneous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

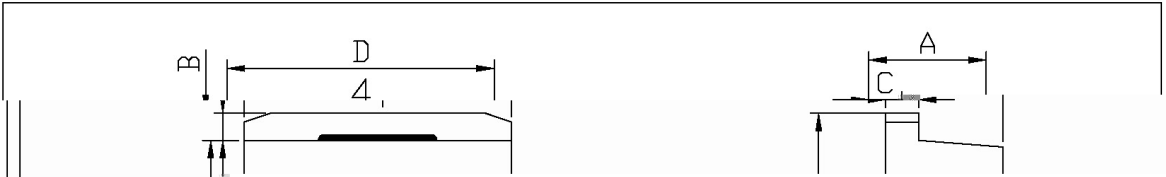
1. /Short duration pulse test used to minimize self-heating effect.

2. / Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve



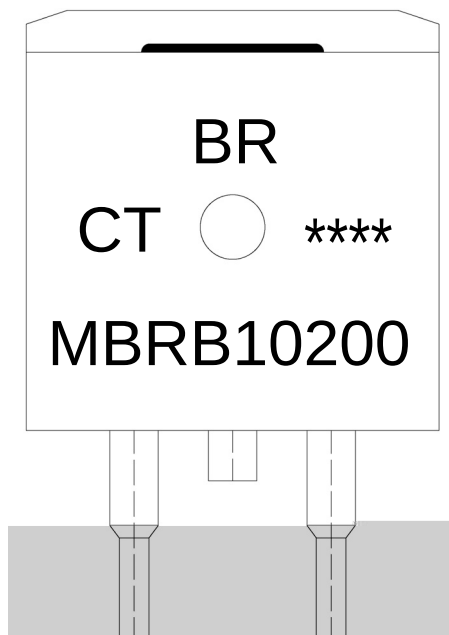
/ Package Dimensions



单位: mm

Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
b1	1.15	1.35	e1	2.24	2.74
b2	0.70	0.90	e2	4.88	5.38
b1	1.15	1.35	L1	15.00	16.00
b2	0.40	0.60	L2	2.24	2.74
C	1.20	1.40	L3	1.20	1.40
D	9.80	10.20			

/ Marking Instructions



BR

MBRB10200

CT:

Note:

BR:

Company Code

MBRB10200

Product Type.

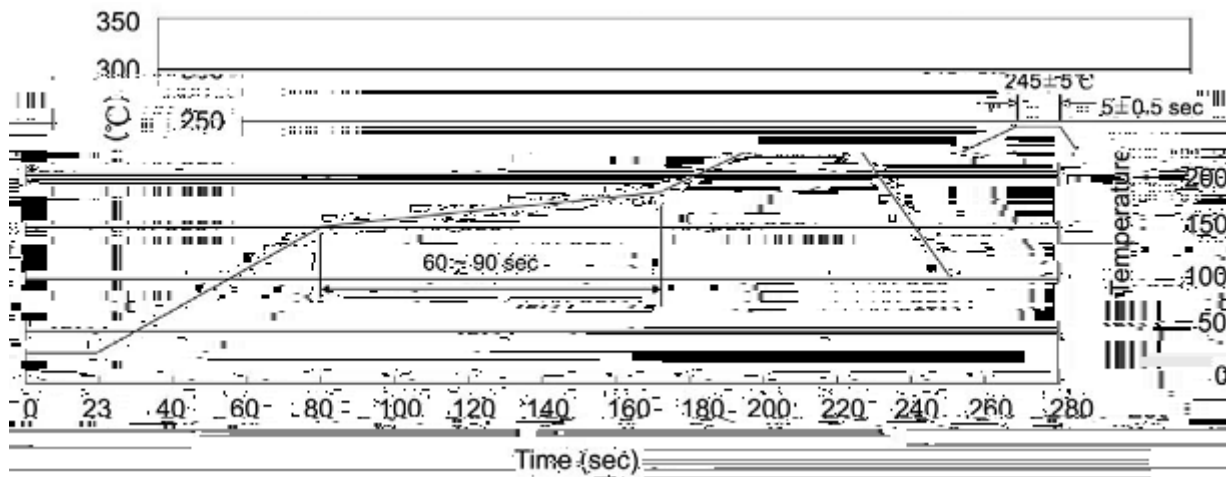
CT:

Internal Structure

****:

Lot No. Code, code change with Lot No.

() /



Note:

- | | | | |
|---|--------|-----------|---|
| 1 | 25 150 | 60 90sec; | 1.Preheating:25~150 °C, Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 °C, Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 °C/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 ³)		
	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 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-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices