

MBRD20200CT

Rev. A Jun.-2022



DATA SHEET

/ Revised record

A	2022-6-17		MBR20200CT TO-252		

/ Descriptions

TO-252

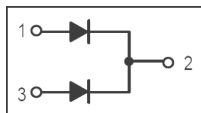
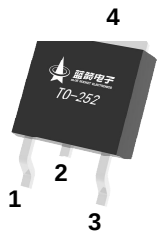
Schottky Barrier Diode in a TO-252 Plastic Package.

/ Features

Low power loss, high efficiency, HF Product.

/ 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

/ Marking

See Marking Instructions

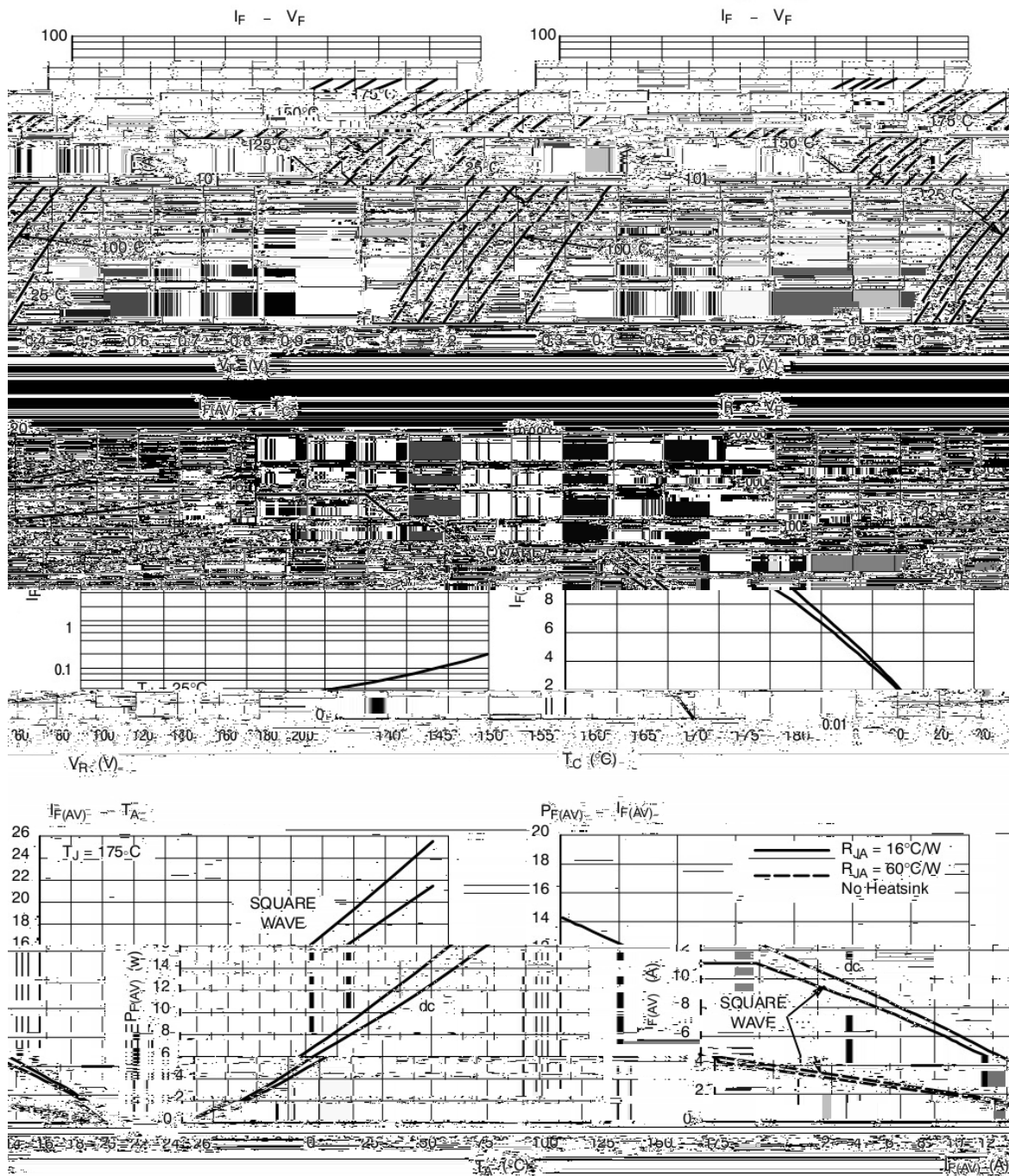
/ Absolute Maximum Ratings(Ta=25)

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
	$I_{F(AV)}^{(total)}$	20	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	150	A
Repetitive Peak Reverse Surge Current	I_{RRM}	1.0	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.0	°C/W
Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{stg}	-65~150	°C

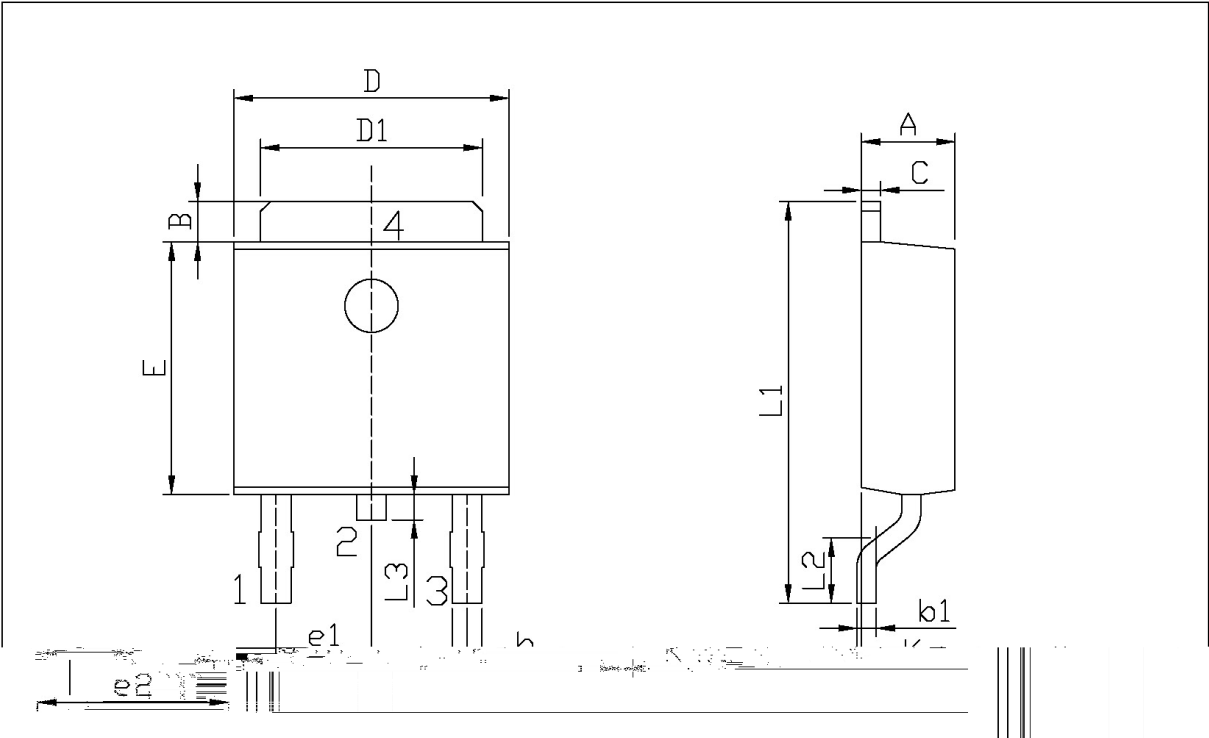
/ Electrical Characteristics(Ta=25)

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

/ Electrical Characteristic Curve



/ Package Dimensions

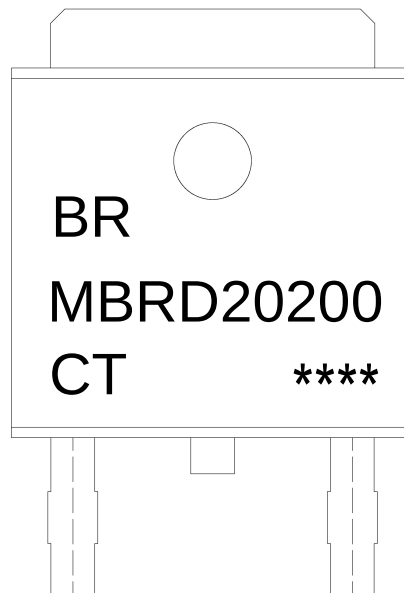


单位: mm

Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Max	Min	Symbol	Max	Min
A	2.90	2.60	B	0.90	0.75
D	6.45	6.75	C	0.10	0.00
D1	5.10	5.50	L1	9.45	9.00
b	0.50	0.90	L2	1.20	0.95
b1	0.45	0.55	L3	0.60	0.90
e1	0.60	0.50	K	0.00	0.10
e2	4.43	4.00			

T0-252

/ Marking Instructions



BR

MBRD20200

CT:

Note:

BR:

Company Code

MBRD20200

Product Type

CT:

Internal Structure

****:

Lot No. Code, code change with Lot No

() /

说明：

- 1、预热温度 150~180℃，时间 60~90sec;
- 2、峰值温度 245±5℃，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10℃/sec.

Note:

- 1.Preheating:150~180℃, Time:60~90sec.
- 2.Peak Temp.:245±5℃, Duration:5±0.5sec.
3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

温度：260±5℃

时间：10±1 sec.

Temp.:260±5℃

Time:10±1 sec

/ Packaging SPEC.

卷盘包装 / 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-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

套管包装 / 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-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices