MBRD20200CT

Rev. A Jun.-2022

DATA SHEET

TO-252

Schottky Barrier Diode in a TO-252 Plastic Package.

Low power loss, high efficiency, HF Product.

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

/ 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	℃/W
Junction Temperature Range	T_j	150	℃
Storage Temperature Range	T_{stg}	-65 150	℃

/ Electrical Characteristics(Ta=25)

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

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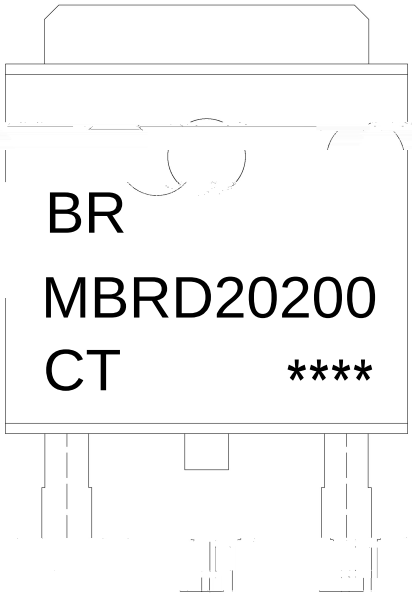
/ Marking Instructions



BR

MBRD20200

CT:

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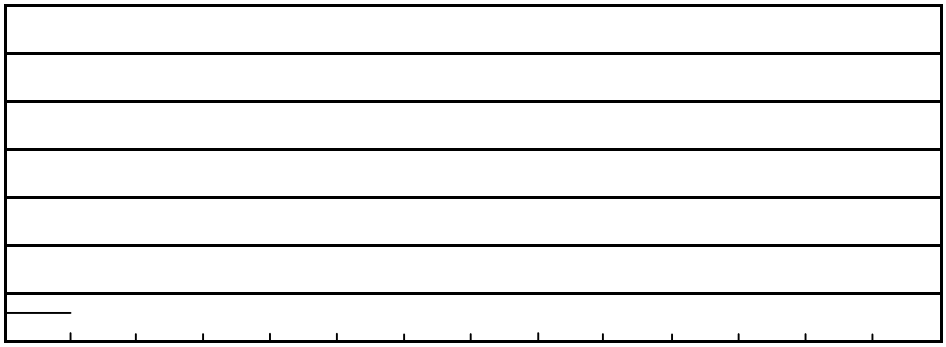
Note:

BR:	Company Code
MBRD20200	Product Type
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



		Note:
1	150 180 60 90sec;	1.Preheating:150~180 , 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℃ 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 /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	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

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	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