

Description

The MBR20200CT is schottky barrier diode, TO-220 plastic package.

Features

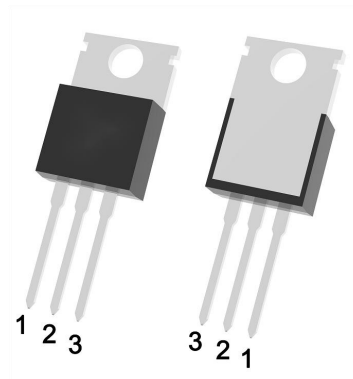
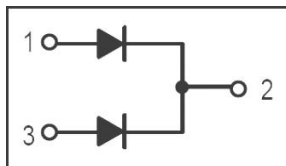
- Low power loss
- High efficiency

Applications

- For use in low voltage
- High frequency inverters
- Free wheeling
- Polarity protection applications

V_{RM}	$I_{F(AV)}$ (total)	I_{FSM}
200V	20A	150A

Equivalent Circuit & Pinning



PIN1: Anode PIN 2: Cathode PIN 3: Anode

Marking

See Marking Instructions.

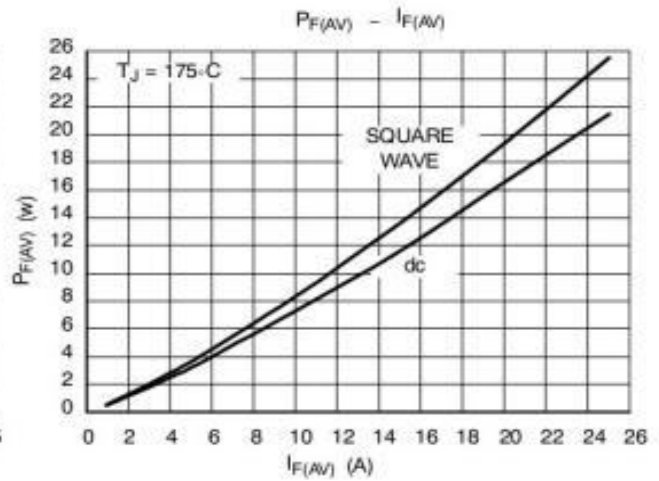
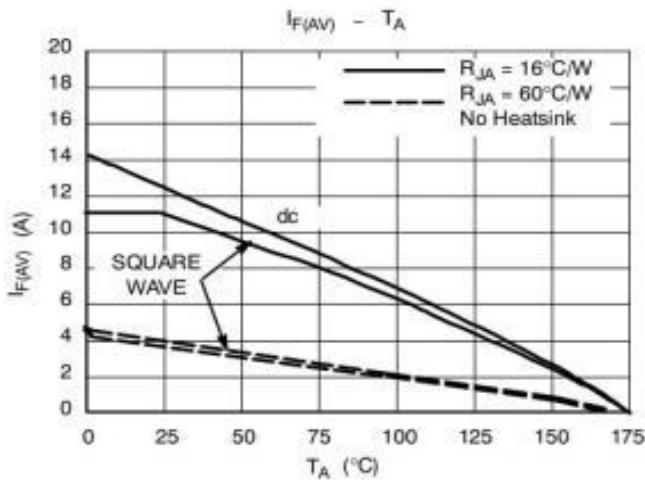
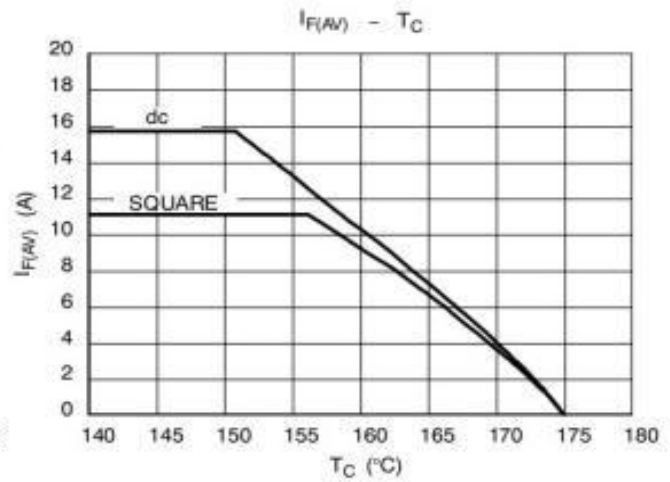
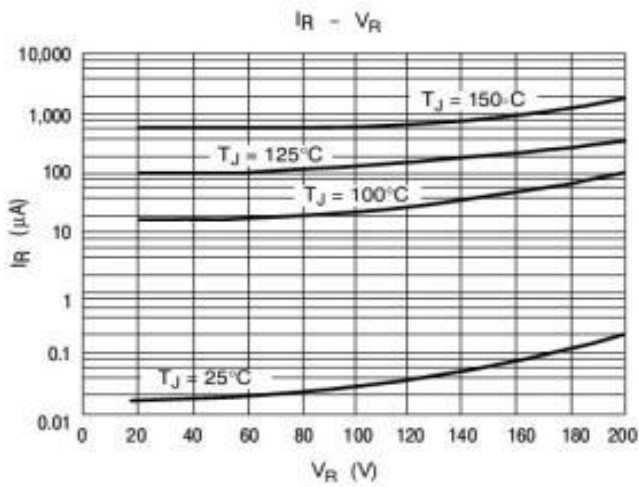
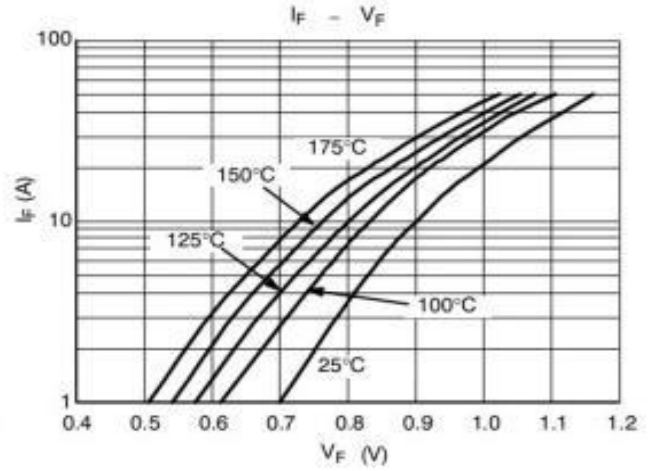
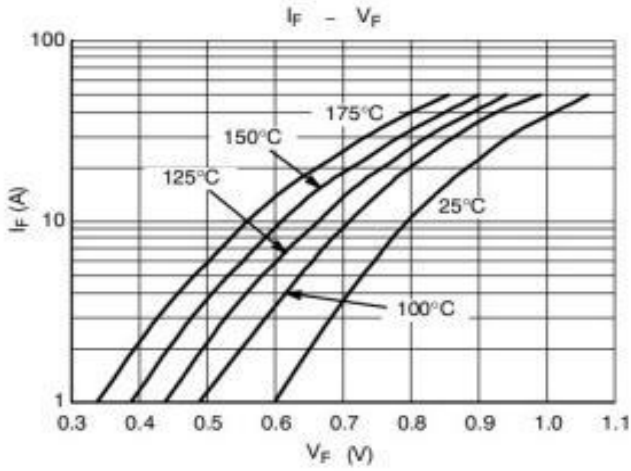
Absolute Maximum Ratings(Ta=25°C)

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	175	°C
Storage Temperature Range	T_{stg}	-65~150	°C

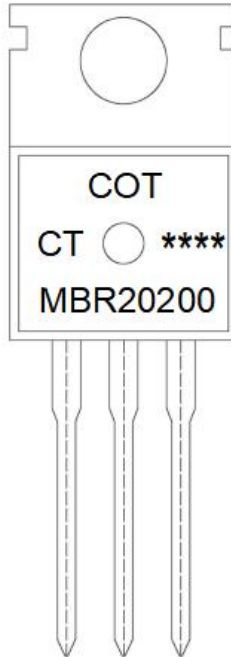
Electrical Characteristics(Ta=25°C)

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



Marking instructions



Note:

COT: Company Code

MBR20200: Product Type.

CT: Internal Structure

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

Packaging SPEC.

BULK

Package Type	Units					Dimension (unit: mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

TUBE

Package Type	Units					Dimension (unit: mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

Package Dimensions.

TO-220

单位: mm

