



**MBR10200C**

Preliminary

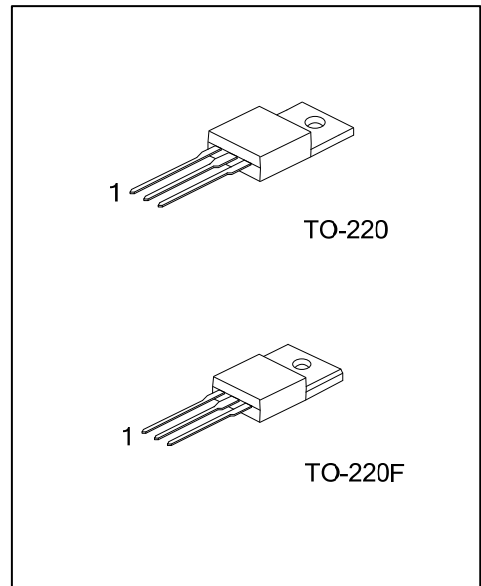
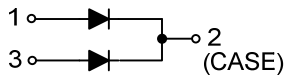
**DIODE**

**SCHOTTKY BARRIER RECTIFIER**

■ **FEATURES**

- \* 10 amps total (20 amps per diode leg)
- \* Guard ring for transient protection
- \* Low forward voltage drop
- \* High surge capability
- \* Low power loss/High efficiency

■ **SYMBOL**



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR10200CL-TA3-T	MBR10200CG-TA3-T	TO-220	A	K	A	Tube
MBR10200CL-TF3-T	MBR10200CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR10200CL-TA3-T</p> <p>(1)Packing Type (2)Package Type (3)Lead Free</p>	<p>(1) T: Tube (2) TA3: TO-220, TF3: TO-220F (3) L: Lead Free, G: Halogen Free</p>
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■ **MARKING INFORMATION**

PACKAGE	MARKING
TO-220/TO-220F	<p>UTC MBR10200C</p> <p>Lot Code ← [ ] [ ] [ ] [ ] [ ] → Data Code</p> <p>L: Lead Free G: Halogen Free</p> <p>1 2 3</p>

■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	200	V
Maximum non-repetitive Peak Reverse Voltage		V <sub>RM</sub>	200	V
Maximum DC Blocking Voltage		V <sub>R</sub>	200	V
Average Forward Rectified Output Current	Per Leg	I <sub>O</sub>	5	A
	Total		10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		I <sub>FSM</sub>	150	A
Junction Capacitance (Note 4)		C <sub>J</sub>	300	pF
Operating Temperature		T <sub>J</sub>	-65 ~ +150	°C
Storage Temperature		T <sub>STG</sub>	-65 ~ +150	°C

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient		θ <sub>JA</sub>	60	°C/W
Junction to Case	TO-220	θ <sub>JC</sub>	2	°C/W
	TO-220F		4	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop (Note 3)	V <sub>F</sub>	I <sub>F</sub> =5A, T <sub>C</sub> =25°C			0.90	V
		I <sub>F</sub> =5A, T <sub>C</sub> =125°C			0.85	V
		I <sub>F</sub> =10A, T <sub>C</sub> =25°C			1	V
		I <sub>F</sub> =10A, T <sub>C</sub> =125°C			0.95	V
Instantaneous Reverse Current (Note 3)	I <sub>R</sub>	Rated DC Voltage, T <sub>C</sub> =25°C			500	μA
		Rated DC Voltage, T <sub>C</sub> =125°C			20	mA

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

- 2.0μs Pulse Width, f = 1.0KHz.
- Pulse Test: Pulse Width=300μs, Duty Cycle≤ 2.0%.
- Applied V<sub>R</sub> = 4.0V and f = 1.0MHz.

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