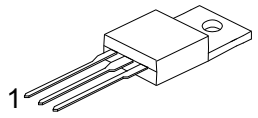
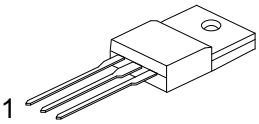
MBR30200C **Preliminary** ***DIODE***

30A, 200V SCHOTTKY BARRIER RECTIFIER



TO-220



TO-220F1

■ DESCRIPTION

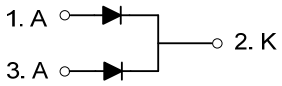
The UTC **MBR30200C** is a 30A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

The UTC **MBR30200C** is suitable for free wheeling and polarity protection, etc.

■ FEATURES

* Low reverse current
* High current capability
* Low power loss
* High efficiency
* For use in low voltage, high frequency inverters

■ SYMBOL



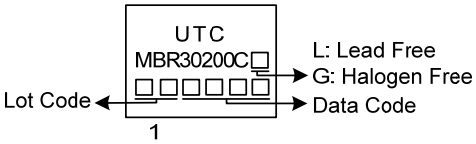
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR30200CL-TA3-T	MBR30200CG-TA3-T	TO-220	A	K	A	Tube
MBR30200CL-TF1-T	MBR30200CG-TF1-T	TO-220F1	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

MBR30200CL-TA3-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube (2) TA3: TO-220, TF1: TO-220F1 (3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER		SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage		V_{RWM}	200	V
Repetitive Peak Reverse Voltage		V_{RRM}	200	V
Maximum RMS Reverse Voltage		$V_{R(RMS)}$	140	V
DC Blocking Voltage		V_R	200	V
Average Rectified Output Current	Per Leg	I_O	15	A
Per Device	Total		30	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		I_{FSM}	180	A
Operating Junction Temperature (Note 1)		T_J	-65~+150	°C
Storage Temperature (Note 1)		T_{STG}	-65~+150	°C

Note: 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.

■ THERMAL CHARACTERISTICS

PARAMETER		SYMBOL	RATINGS	UN IT
Junction to Ambient		θ_{JA}	62.5	°C/W
Junction to Case	TO-220	θ_{JC}	1.8	°C/W
	TO-220F1		3.3	°C/W

■ ELECTRICAL CHARACTERISTICS (Note 2) (T_A=25°C, unless otherwise noted.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.50mA	200			V
Instantaneous Forward Voltage	V_F	I_F=15A, T_C=25°C			0.90	V
		I_F=15A, T_C=125°C			0.80	V
Instantaneous Reverse Current	I_R	V_R=200V, T_J=25°C			50	μA
		V_R=200V, T_J=125°C			10	mA

Notes: 1. The heat generated must be less than the thermal conductivity from Junction to Ambient: $P_D/T_J<1/\theta_{JA}$.
2. Pulse Test: Pulse Width=300μs, Duty Cycle≤2.0%.