



MBR20150C

DIODE

SCHOTTKY BARRIER RECTIFIER

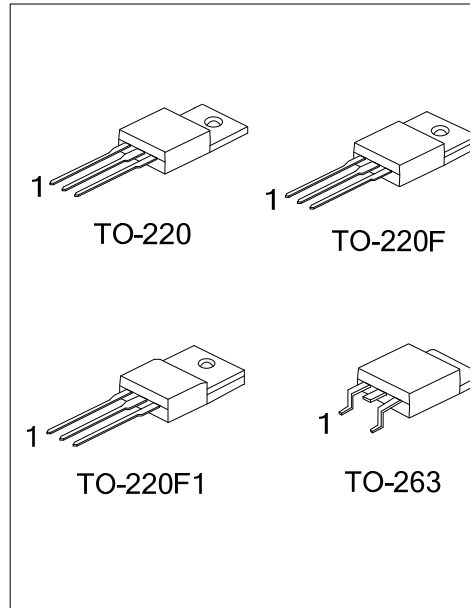
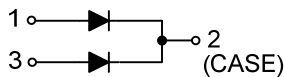
DESCRIPTION

The UTC **MBR20150C** is a Schottky Barrier Rectifier with high junction temperature capacity.

FEATURES

- * Good trade off between leakage current and forward voltage drop
- * High junction temperature capability
- * Low leakage current

SYMBOL



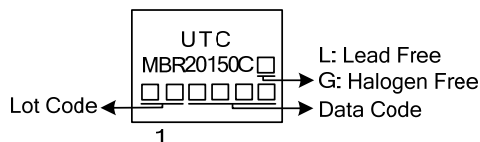
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR20150CL-TA3-T	MBR20150CG-TA3-T	TO-220	A	K	A	Tube
MBR20150CL-TF3-T	MBR20150CG-TF3-T	TO-220F	A	K	A	Tube
MBR20150CL-TF1-T	MBR20150CG-TF1-T	TO-220F1	A	K	A	Tube
MBR20150CL-TQ2-T	MBR20150CG-TQ2-T	TO-263	A	K	A	Tube
MBR20150CL-TQ2-R	MBR20150CG-TQ2-R	TO-263	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR20150CL-TA3-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube, R: Tape Reel (2) TA3: TO-220, TF3: TO-220F, TF1: TO-220F1 TQ2: TO-263 (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATING ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Recurrent Peak Reverse Voltage		V_{RRM}	150	V
RMS Voltage		$V_{R(RMS)}$	105	V
DC Blocking Voltage		V_R	150	V
Average Forward Rectified Output Current	Per Leg	I_o	10	A
	Total		20	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		I_{FSM}	150	A
Junction Capacitance (Note 4)		C_J	320	pF
Junction Temperature		T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient		θ_{JA}	60	$^{\circ}\text{C}/\text{W}$
Junction to Case	TO-220/TO-263	θ_{JC}	2	$^{\circ}\text{C}/\text{W}$
	TO-220F/TO-220F1		4	$^{\circ}\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop (Note 3)	V_F	$I_F=10\text{A}, T_C=25^{\circ}\text{C}$			0.92	V
		$I_F=10\text{A}, T_C=125^{\circ}\text{C}$			0.8	V
		$I_F=20\text{A}, T_C=25^{\circ}\text{C}$			1.05	V
		$I_F=20\text{A}, T_C=125^{\circ}\text{C}$			1	V
Instantaneous Reverse Current (Note 3)	I_R	Rated DC Voltage, $T_C=25^{\circ}\text{C}$			0.20	mA
		Rated DC Voltage, $T_C=125^{\circ}\text{C}$			5	

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.

- 2.0 μs Pulse Width, $f = 1.0\text{KHz}$.
- Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2.0\%$.
- Applied $V_R = 4.0\text{V}$ and $f = 1.0\text{MHz}$.

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