



MBR30150C

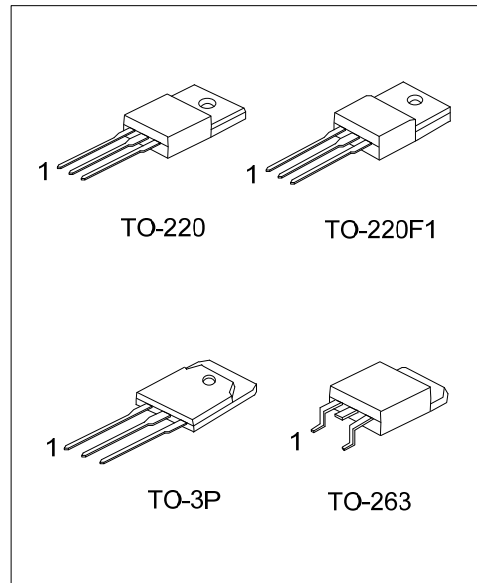
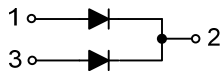
DIODE

SCHOTTKY BARRIER RECTIFIER

FEATURES

- * 30 amps total (15 amps per diode leg)
- * Guard ring for transient protection
- * Low forward voltage drop
- * High surge capability
- * Low power loss/High efficiency

SYMBOL



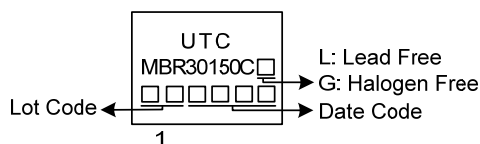
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR30150CL-TA3-T	MBR30150CG-TA3-T	TO-220	A	K	A	Tube
MBR30150CL-TF1-T	MBR30150CG-TF1-T	TO-220F1	A	K	A	Tube
MBR30150CL-TQ2-T	MBR30150CG-TQ2-T	TO-263	A	K	A	Tube
MBR30150CL-TQ2-R	MBR30150CG-TQ2-R	TO-263	A	K	A	Tape Reel
MBR30150CL-T3P-T	MBR30150CG-T3P-T	TO-3P	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR30150CG-TA3-T</p>	<p>(1) T: Tube, R: Tape Reel (2) TA3: TO-220, TF1: TO-220F1, TQ2: TO-263 T3P: TO-3P (3) G: Halogen Free and Lead Free, L: Lead Free</p>
-------------------------	--

MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	150	V
Maximum non-repetitive Peak Reverse Voltage		V _{RM}	150	V
Maximum DC Blocking Voltage		V _R	150	V
Average Forward Rectified Output Current	Per Leg	I _O	15	A
	Total		30	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		I _{FSM}	200	A
Junction Capacitance (Note 4)		C _J	300	pF
Operating Temperature		T _J	-65 ~ +175	°C
Storage Temperature		T _{STG}	-65 ~ +175	°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 RESISTANCES CHARACTERISTICS

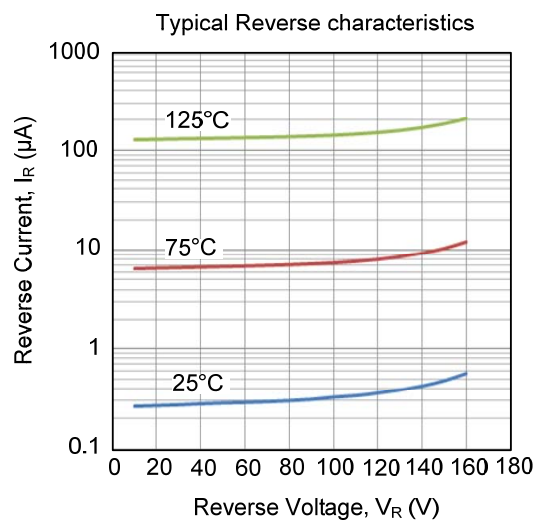
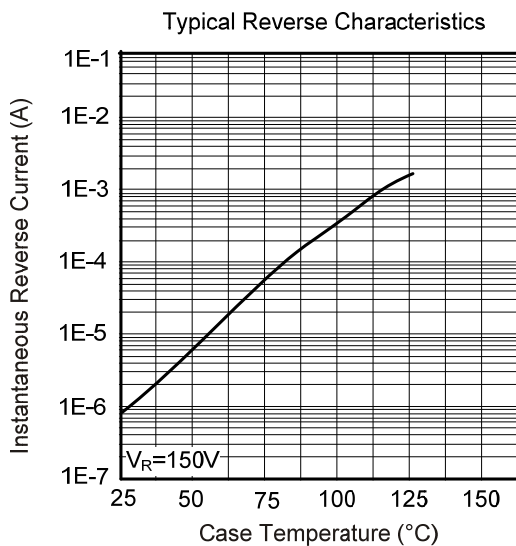
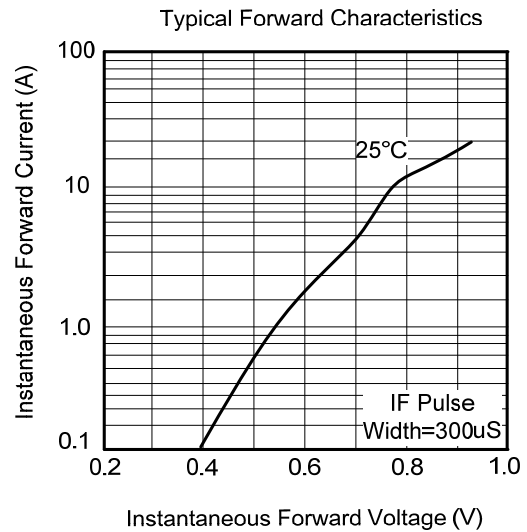
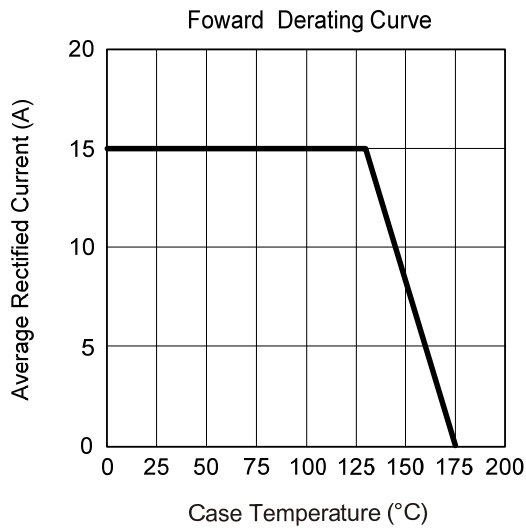
PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	TO-220/TO-263 TO-220F1	θ _{JA}	60	°C/W
	TO-3P		29	
	TO-220/TO-263		2	
Junction to Case	TO-220/TO-263	θ _{JC}	2	°C/W
	TO-220F1		3.3	
	TO-3P		1.5	

■ ELECTRICAL CHARACTERISTICS (Note 2)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop	V _F	I _F =15A, T _C =25°C			0.90	V
		I _F =15A, T _C =125°C			0.85	V
		I _F =30A, T _C =25°C			1	V
		I _F =30A, T _C =125°C			0.95	V
Instantaneous Reverse Current	I _R	Rated DC Voltage, T _C =25°C			500	μA
		Rated DC Voltage, T _C =125°C			20	mA

Notes: 1. 2.0μs Pulse Width, f = 1.0 KHz.
 2. Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.
 3. Applied V_R = 4.0V and f = 1.0 MHz.

■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.