



MBR760

Preliminary

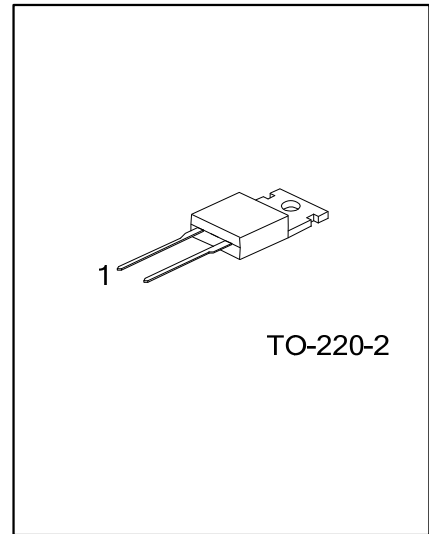
DIODE

7.5A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The UTC **MBR760** is a 7.5A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low power loss, low forward voltage drop, high efficiency and high current capability.

The UTC **MBR760** is suitable for free wheeling, high frequency inverters, polarity protection application.



FEATURES

- * Low power loss
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High efficiency

SYMBOL



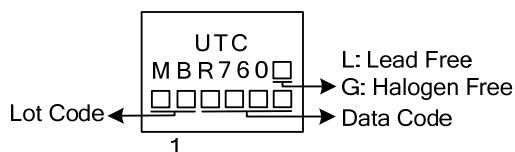
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR760L-TA2-T	MBR760G-TA2-T	TO-220-2	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR760L-TA2-T</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) T: Tube (2) TA2: TO-220-2 (3) L: Lead Free, G: Halogen Free and Lead Free
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MARKING



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

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectified Output Current e(Note 1) $T_C=+125^{\circ}\text{C}$	I_O	7.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	150	A
Voltage Rate of Change (Rated V_R)	dV/dt	10000	V/us
Operating Temperature	T_J	-65~+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~+150	$^{\circ}\text{C}$

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	UNIT
Junction to Case (Note 1)	θ_{JC}	3.5	$^{\circ}\text{C/W}$

■ ELECTRICAL CHARACTERISTICS ($T_A=+25^{\circ}\text{C}$ unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_{FM}	$I_F=7.5\text{A}, T_C=25^{\circ}\text{C}$			0.72	V
		$I_F=7.5\text{A}, T_C=125^{\circ}\text{C}$			0.67	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	$T_C=25^{\circ}\text{C}$			1.0	mA
		$T_C=125^{\circ}\text{C}$			50	mA
Junction Capacitance (Note 2)	C_J			400		pF

Notes: 1. Thermal resistance junction to case mounted on heatsink
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

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