



# UMUR1660

**DIODE**

## SWITCHMODE POWER RECTIFIERS

### DESCRIPTION

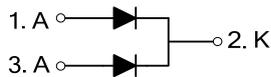
The UTC **UMUR1660** contains dual surface mount schottky barrier rectifiers, it uses UTC's advanced technology to provide customers with low leakage reverse current and high voltage capability, etc.

The UTC **UMUR1660** is suitable for inverters and switching power supplies, etc.

### FEATURES

- \* High voltage capability
- \* Low leakage reverse current

### SYMBOL



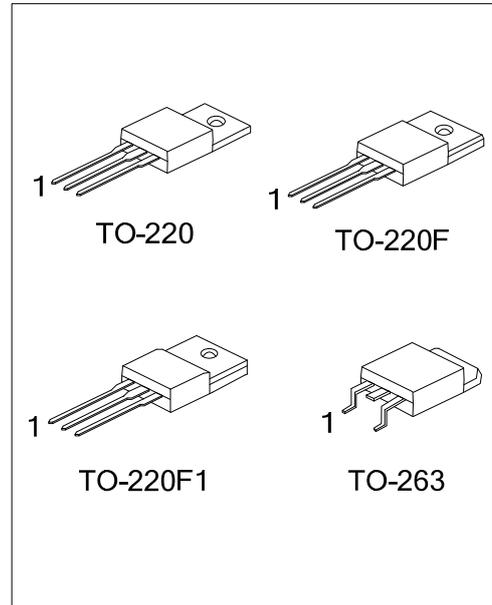
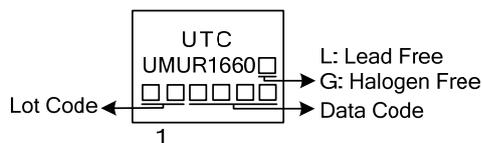
### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UMUR1660L-TA3-T	UMUR1660G-TA3-T	TO-220	A	K	A	Tube
UMUR1660L-TF3-T	UMUR1660G-TF3-T	TO-220F	A	K	A	Tube
UMUR1660L-TF1-T	UMUR1660G-TF1-T	TO-220F1	A	K	A	Tube
UMUR1660L-TQ2-T	UMUR1660G-TQ2-T	TO-263	A	K	A	Tube
UMUR1660L-TQ2-R	UMUR1660G-TQ2-R	TO-263	A	K	A	Tape Reel

Note: Pin Assignment: G: Gate D: Drain S: Source

<p>UMUR1660L-TA3-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F, TF1: TO-220F1</p> <p>TQ2: TO-263</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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### MARKING



## ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER		SYMBOL	RATINGS	UNIT
DC Blocking Voltage		$V_R$	600	V
Working Peak Reverse Voltage		$V_{RWM}$	600	V
Peak Repetitive Reverse Voltage		$V_{RRM}$	600	V
Average Rectified Forward Current Total Device, (Rated $V_R$ ), $T_C=150^\circ\text{C}$	Per Leg	$I_{F(AV)}$	8.0	A
	Total		16	A
Peak Rectified Forward Current (Rated $V_R$ , Square Wave, 20kHz), $T_C=150^\circ\text{C}$		$I_{FM}$	16	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)		$I_{FSM}$	100	A
Storage Temperature		$T_{STG}$	-65~+175	$^\circ\text{C}$
Operating Junction Temperature		$T_J$	-65~+175	$^\circ\text{C}$

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 (PER LEG)

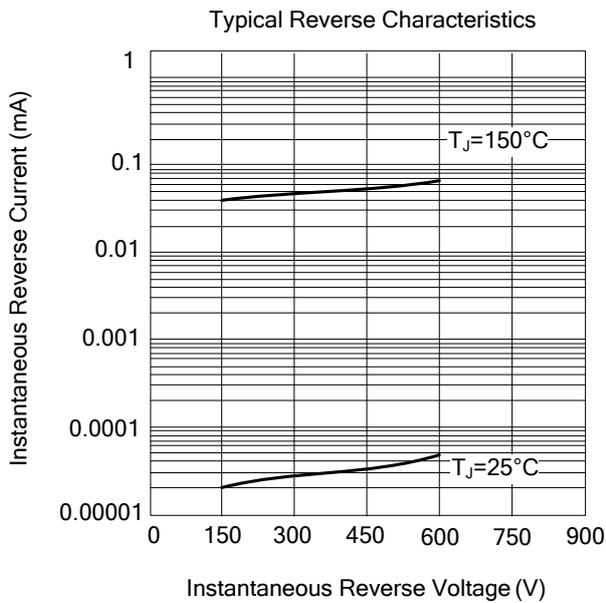
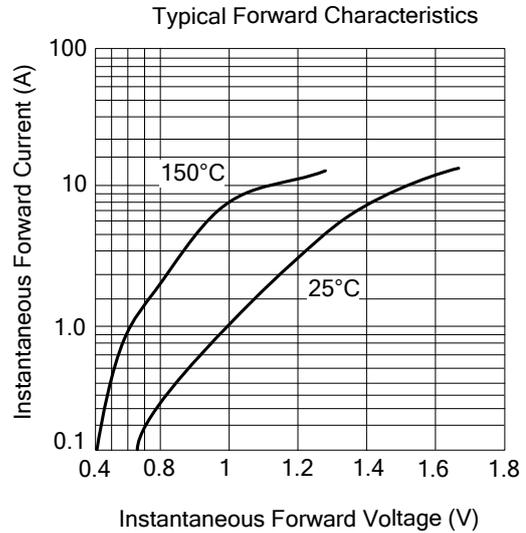
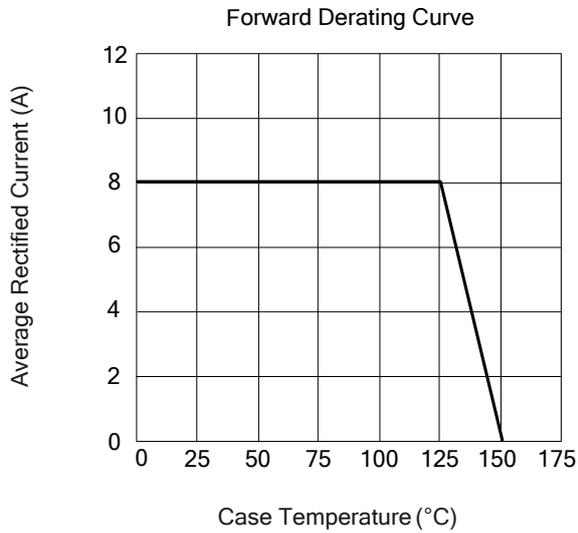
PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Case	TO-220/TO-263	$\theta_{JC}$	2	$^\circ\text{C/W}$
	TO-220F/TO-220F1		3.4	$^\circ\text{C/W}$

## ■ ELECTRICAL CHARACTERISTICS (PER DIODE LEG)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	$V_F$	$I_F=8\text{A}$ , $T_C=25^\circ\text{C}$			1.50	V
		$I_F=8\text{A}$ , $T_C=150^\circ\text{C}$			1.20	V
Instantaneous Reverse Current (Note)	$I_R$	Rated dc Voltage, $T_C=25^\circ\text{C}$			10	$\mu\text{A}$
		Rated dc Voltage, $T_C=150^\circ\text{C}$			500	$\mu\text{A}$
Reverse Recovery Time	$t_{RR}$	$I_F=1.0\text{A}$ , $di/dt=50\text{A}/\mu\text{s}$			60	ns
		$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{REC}=0.25\text{A}$			50	ns

Note: Pulse Test: Pulse Width=300 $\mu\text{s}$ , Duty Cycle $\leq$ 2.0%

## ■ TYPICAL CHARACTERISTICS



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