



UMUR1660

Preliminary

DIODE

SWITCHMODE POWER RECTIFIERS

■ **DESCRIPTION**

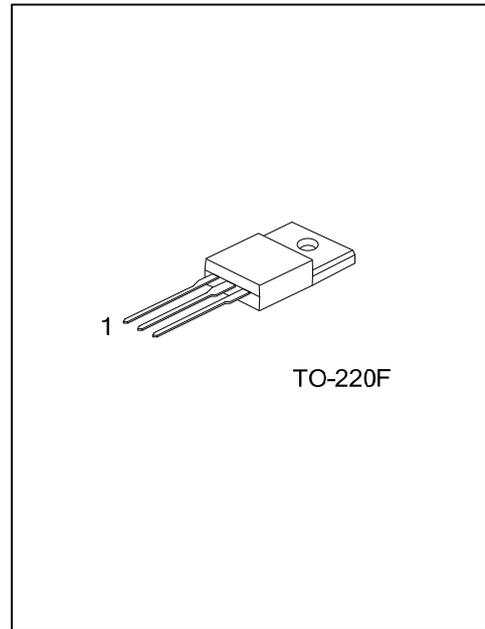
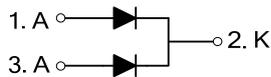
The UTC **UMUR1660** contains dual surface mount schottky barrier rectifiers, it uses UTC's advanced technology to provide customers with low leakage reverse current and high voltage capability, etc.

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-TF3-T	UMUR1660G-TF3-T	TO-220F	A	K	A	Tube

<p>UMUR1660L-TA3-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Free</p>	<p>(1) T: Tube</p> <p>(2) TF3: TO-220F</p> <p>(3) L: Lead Free, G: Halogen Free</p>
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■ 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	8.0	A
	Total	16	A
Peak Rectified Forward Current (Rated V_R , Square Wave, 20kHz), $T_C=150^\circ\text{C}$	Per Leg	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	θ_{JC}	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	μA
		Rated dc Voltage, $T_C=150^\circ\text{C}$			500	μA
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 μs , Duty Cycle \leq 2.0%

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