



UMUR1060C

Preliminary

DIODE

SWITCHMODE POWER RECTIFIERS

DESCRIPTION

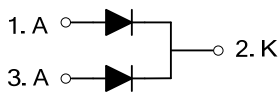
The UTC **UMUR1060C** is a switchmode power rectifier, it uses UTC's advanced technology to provide customers with high voltage capability, low forward drop and low leakage current, etc.

The UTC **UMUR1060C** is suitable for use in switching power supplies, inverters and as free wheeling diodes.

FEATURES

- * Ultrafast and nanosecond recovery time
- * High voltage capability
- * Low forward drop
- * Low leakage current

SYMBOL



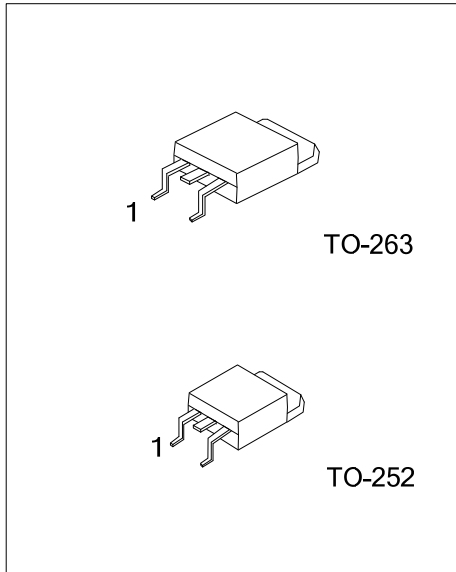
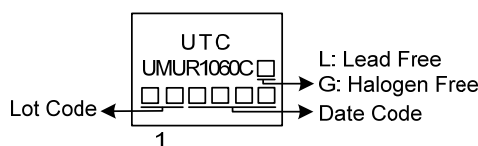
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UMUR1060CL-TN3-R	UMUR1060CG-TN3-R	TO-252	A	K	A	Tape Reel
UMUR1060CL-TQ2-T	UMUR1060CG-TQ2-T	TO-263	A	K	A	Tube
UMUR1060CL-TQ2-R	UMUR1060CG-TQ2-R	TO-263	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>UMUR1060CG-TN3-R</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) R: Tape Reel, T: Tube (2) TN3: TO-252, TQ2: TO-263 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



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

PARAMETER		SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage		V_{RRM}	600	V
Working Peak Reverse Voltage		V_{RWM}	600	V
DC Blocking Voltage		V_R	600	V
Average Forward Current	Per Leg	I_O	5	A
	Total Device		10	A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)		I_{FSM}	60	A
Operating Junction 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 DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Case	TO-252	θ_{JC}	2.5	$^\circ\text{C/W}$
	TO-263		2	$^\circ\text{C/W}$

■ ELECTRICAL CHARACTERISTICS

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	$I_R=1\text{mA}$	600			V
Forward Voltage Drop	V_{FM}	$I_F=5.0\text{A}, T_C=25^\circ\text{C}$			1.6	V
		$I_F=5.0\text{A}, T_C=150^\circ\text{C}$			1.4	V
Leakage Current (Note 1)	I_{RM}	Rated DC voltage, $T_J=150^\circ\text{C}$			10	μA
		Rated DC voltage, $T_J=25^\circ\text{C}$			250	μA
Maximum Reverse Recovery Time	t_{rr}	$I_F=1.0\text{A}, di/dt=100\text{A}/\mu\text{s}$		30		ns

Notes: 1. Short duration pulse test used to minimize self-heating effect.

2. Thermal resistance junction to case mounted on heatsink.

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