



UMUR60120

Preliminary

DIODE

SWITCHMODE POWER RECTIFIERS

DESCRIPTION

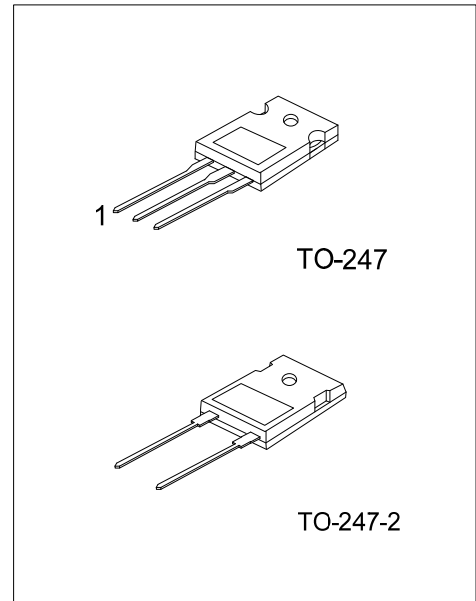
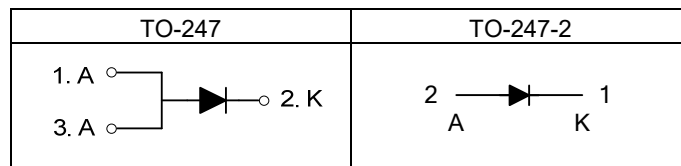
The UTC **UMUR60120** is a switchmode power rectifiers, it uses UTC's advanced technology to provide customers with low forward drop and low leakage current, etc.

The UTC **UMUR60120** is suitable for inverters and switching power supplies, etc.

FEATURES

- * Low forward drop voltage
- * High voltage capability
- * Low leakage current

SYMBOL



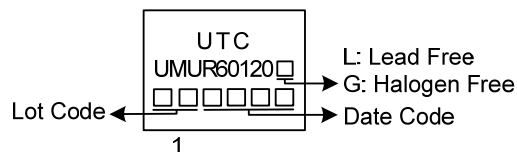
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UMUR60120L-T47-T	UMUR60120G-T47-T	TO-247	A	K	A	Tube
UMUR60120L-T472-T	UMUR60120G-T472-T	TO-247-2	K	A	-	Tube

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

UMUR60120G-T47-T	(1)Packing Type	(1) T: Tube
	(2)Package Type	(2) T47: TO-247, T472: TO-247-2
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	1200	V
Working Peak Reverse Voltage	V_{RWM}	1200	V
Peak Repetitive Reverse Voltage	V_{RRM}	1200	V
Average Rectified Forward Current	$I_{F(AV)}$	60	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	I_{FSM}	240	A
Operating Junction Temperature	T_J	$-40 \sim +150$	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	$-55 \sim +150$	$^{\circ}\text{C}$

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	θ_{JC}	0.8	$^{\circ}\text{C/W}$

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note 1)	V_F	$I_F=60\text{A}$, $T_C=25^{\circ}\text{C}$			2.8	V
		$I_F=60\text{A}$, $T_C=150^{\circ}\text{C}$			2.4	V
Instantaneous Reverse Current (Note 1)	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}	$I_F=1.0\text{A}$, $di/dt=100\text{A}/\mu\text{s}$		51		ns

Note: Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2.0\%$.

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