



UMUR1660

DIODE

SWITCHMODE POWER RECTIFIERS

DESCRIPTION

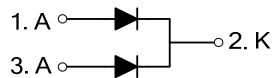
The UTC **UMUR1660** contains dual surface mount schottky barrier rectifiers, it uses UTC's advanced technology to provide customers with low leakage reverse current and high voltage capability, etc.

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

FEATURES

- * High voltage capability
- * Low leakage reverse current

SYMBOL



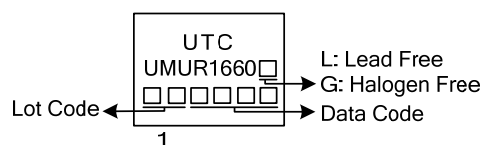
ORDERING INFORMATION

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

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

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), $T_C=150^{\circ}\text{C}$	Per Leg	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)

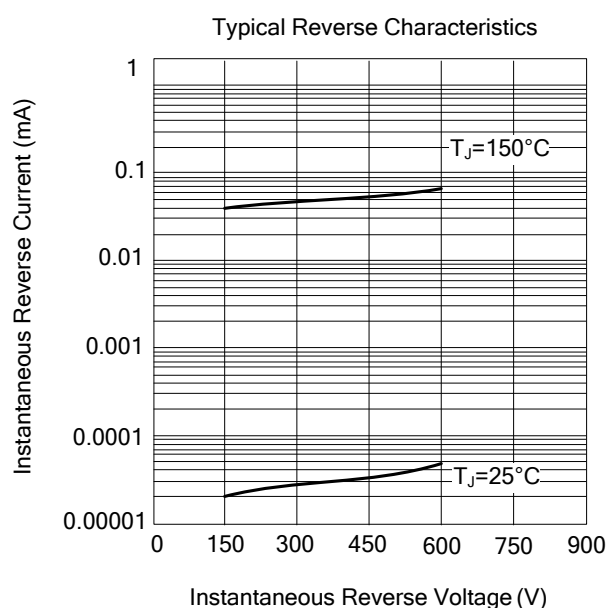
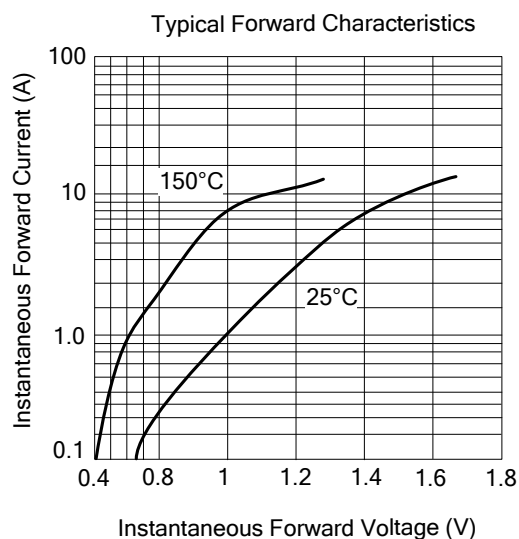
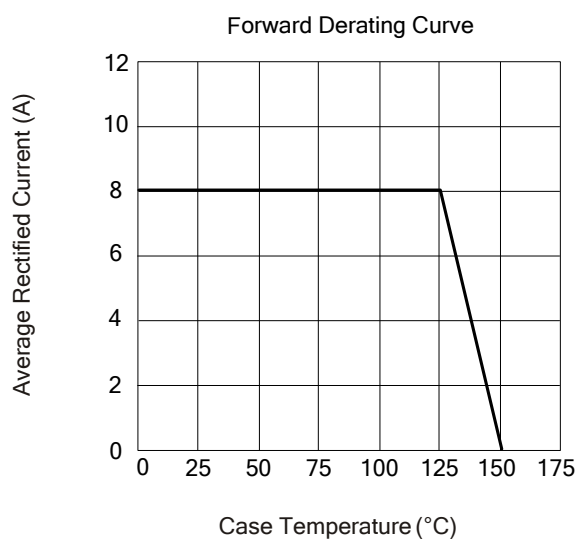
PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Case	TO-220/TO-263	θ_{JC}	2	$^{\circ}\text{C/W}$
	TO-220F/TO-220F1		3.4	$^{\circ}\text{C/W}$

■ 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	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 $\leq 2.0\%$

■ TYPICAL CHARACTERISTICS



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