



U20UC30

Preliminary

DIODE

20A DIODE

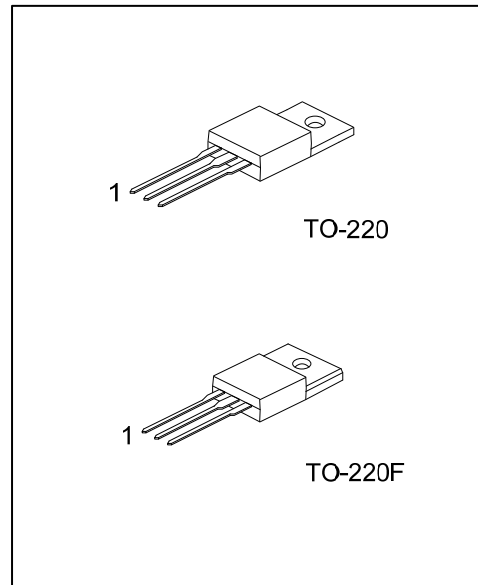
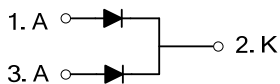
DESCRIPTION

The UTC **U20UC30** is a 20A diode, it uses UTC's advanced technology to provide the customers with low forward voltage drop and fast switching capability.

FEATURES

- * Low forward voltage drop
- * Fast switching capability

SYMBOL



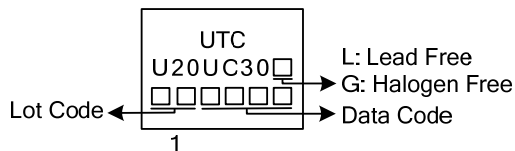
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
U20UC30L-TA3-T	U20UC30G-TA3-T	TO-220	A	K	A	Tube
U20UC30L-TF3-T	U20UC30G-TF3-T	TO-220F	A	K	A	Tube

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

	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Working Peak Reverse Voltage	V_{RWM}	300	V
DC Blocking Voltage	V_{RM}	300	V
Average Rectified Output Current	I_O	20	A
Peak Forward Surge Current 1/2 60hz	I_{FSM}	150	A
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I_{RRM}	1	A
Voltage Rate of Change (at Rated V_R)	dV/dt	10000	V/ μs
Operating and Storage Temperature Range	T_J	-65~+175	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-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 Ambient	θ_{JA}	62.5	$^{\circ}\text{C}/\text{W}$
Junction to Case	TO-220	2	$^{\circ}\text{C}/\text{W}$
	TO-220F	5	

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
Instantaneous Forward Voltage (Note)	V_F	$I_F=10\text{A}$	$T_J=25^{\circ}\text{C}$		1.0	1.3	V
			$T_J=125^{\circ}\text{C}$		0.85	1.0	V
Reverse Current	I_R	At V_{RM}	$T_J=25^{\circ}\text{C}$			25	μA
			$T_J=125^{\circ}\text{C}$			0.1	mA

Note: Pulse width < 300uS, Duty cycle < 2%.

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