



U20UC30

Preliminary

DIODE

20A DIODE

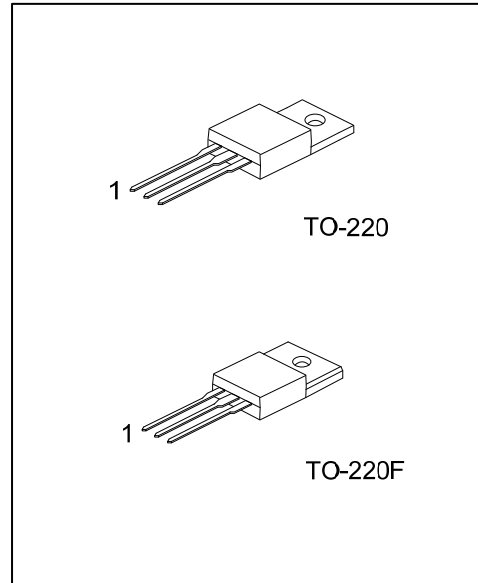
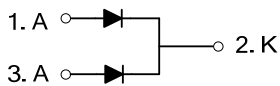
■ DESCRIPTION

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

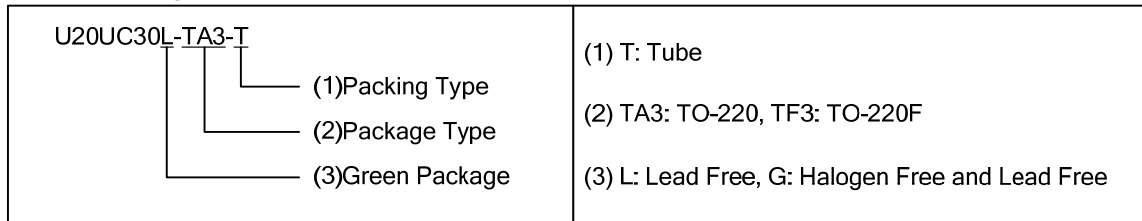
■ SYMBOL



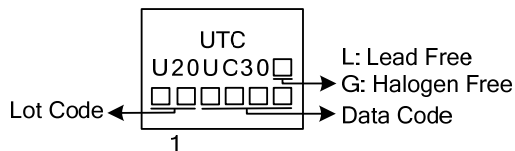
■ ORDERING INFORMATION

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



■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°C
Storage Temperature	T _{STG}	-65~+175	°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	°C/W
Junction to Case	TO-220	2	°C/W
	TO-220F	5	

■ ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
Instantaneous Forward Voltage (Note)	V _F	I _F =10A	T _J =25°C		1.0	1.3	V
			T _J =125°C		0.85	1.0	V
Reverse Current	I _R	At V _{RM}	T _J =25°C		25	μA	
			T _J =125°C		0.1	mA	

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

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