



## FCU20UC30

Preliminary

DIODE

### SILICON DIODE

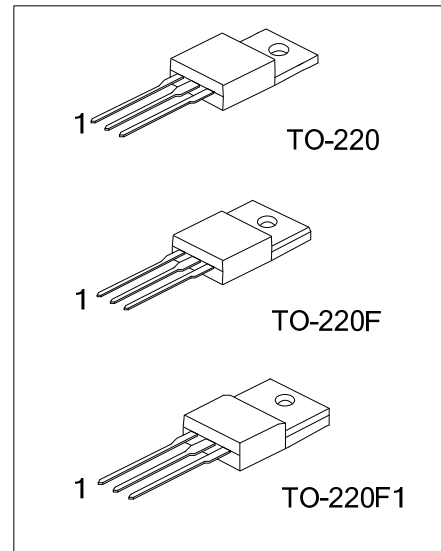
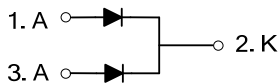
#### DESCRIPTION

The UTC **FCU20UC30** is a diode, it uses UTC's advanced technology to provide customers with low peak reverse current, etc.

#### FEATURES

\* Low peak reverse current

#### SYMBOL



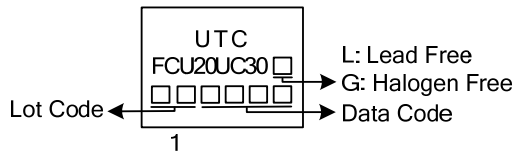
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
FCU20UC30L-TA3-T	FCU20UC30G-TA3-T	TO-220	A	K	A	Tube
FCU20UC30L-TF3-T	FCU20UC30G-TF3-T	TO-220F	A	K	A	Tube
FCU20UC30L-TF1-T	FCU20UC30G-TF1-T	TO-220F1	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>FCU20UC30L-TA3-T</p>	<p>(1) T: Tube  (2) TA3: TO-220, TF3: TO-220F, TF1 : TO-220F1  (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
Repetitive Peak Reverse Voltage		$V_{RRM}$	300	V
Average Rectified Forward Current ( $T_C=104^{\circ}\text{C}$ )	Per Leg	$I_O$	10	A
	Total		20	A
R.M.S Forward Current		$I_{F(RMS)}$	22.2	A
Surge Forward Current		$I_{FSM}$	120	A
Storage Temperature		$T_{STG}$	-40~+150	$^{\circ}\text{C}$
Operating Junction Temperature		$T_J$	-40~+150	$^{\circ}\text{C}$
Mounting Torque		$F_{TOR}$	0.5	N·m

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 RESISTANCE

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	$\theta_{JC}$	2	$^{\circ}\text{C}/\text{W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Peak Reverse Current	$I_{RM}$	$T_J=25^{\circ}\text{C}$ , $V_{RM}=V_{RRM}$			25	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_J=25^{\circ}\text{C}$ , $I_{FM}=10\text{A}$		1.10	1.30	V
Reverse Recovery Time	$t_{RR}$	$I_{FM}=10\text{A}$ , $-di/dt=50\text{A}/\mu\text{s}$ , $T_J=25^{\circ}\text{C}$		23	33	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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