



FCU20UC30

Preliminary

DIODE

SILICON DIODE

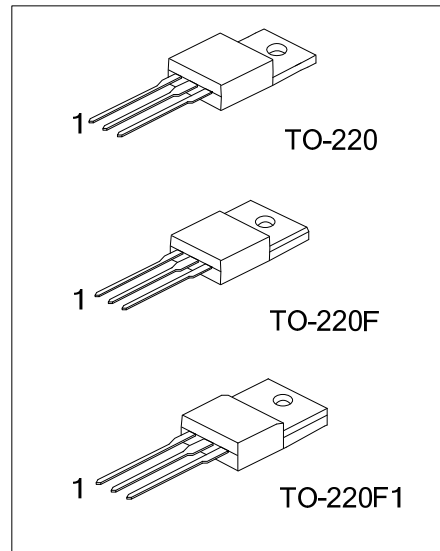
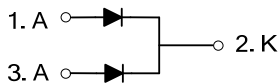
■ DESCRIPTION

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



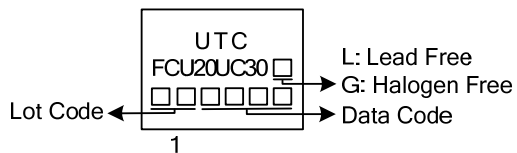
■ ORDERING INFORMATION

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	θ_{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	μA
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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