

Ultrafast Rectifier
RURG3060CC
FEATURES

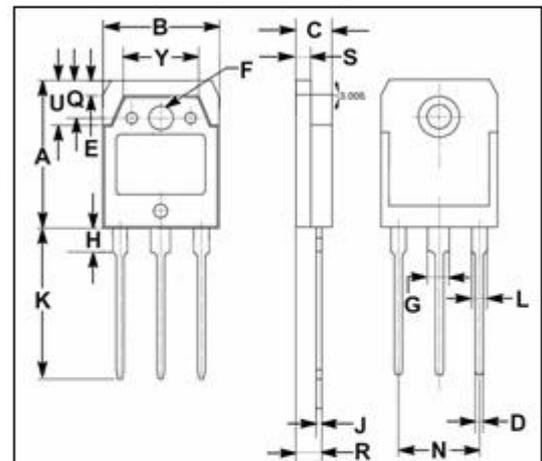
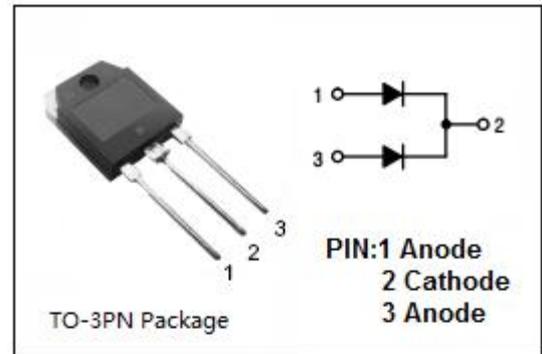
- Ultrafast with soft recovery <math>< 55\text{ns}</math>
- Operating temperature 175°C
- Reverse voltage up to 600V
- Avalanche energy rated
- Planar construction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS (per leg) $T_c=25^{\circ}\text{C}$

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	600	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$I_{F(AV)}$	Average Rectified Forward Current $T_c=130^{\circ}\text{C}$	30	A
I_{FRM}	repetitive Peak Surge Current (Square wave,20Hz)	70	A
I_{FSM}	Nonrepetitive Peak Surge Current (Halfwave,1 phase 60Hz)	325	A
P_D	Maximum power dissipation	125	W
T_J	Junction Temperature	-65~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

Fast Recovery Rectifier
RURG3060CC
THERMAL CHARACTERISTICS(per leg)

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance,Junction to Case	1.2	°C/W

ELECTRICAL CHARACTERISTICS (per leg) (Tc=25°C) (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F^*	Maximum Instantaneous Forward Voltage	$I_F=30A ; T_j=25^{\circ}C$ $I_F=30A ; T_j=150^{\circ}C$	1.5 1.3	V
I_R^*	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}C$ $V_R=V_{RWM}; T_j=150^{\circ}C$	250 1000	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=1A;$	55	ns
t_{rr}	Maximum Reverse Recovery Time	$I_F=30A;$	60	ns

*:Pulse Test:Pulse width=300us,duty cycle≤2.0%

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