

**Ultrafast Rectifier**
**RURG3060CC**
**FEATURES**

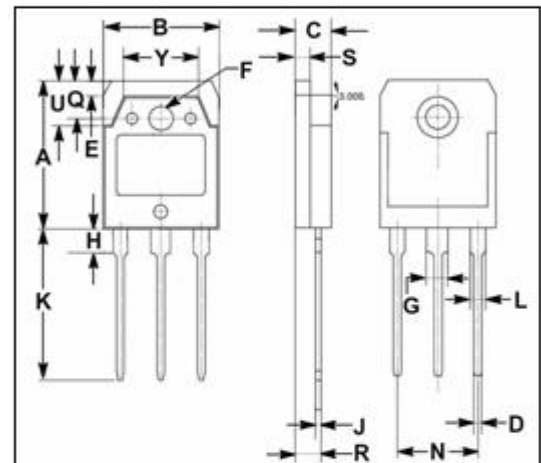
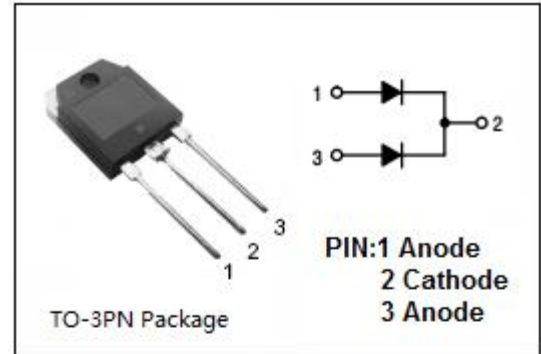
- Ultrafast with soft recovery <math>< 55\text{ns}</math>
- Operating temperature  $175^{\circ}\text{C}$
- Reverse voltage up to 600V
- Avalanche energy rated
- Planar construction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits
- General purpose

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$ $V_{RWM}$ $V_R$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
$I_{F(AV)}$	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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