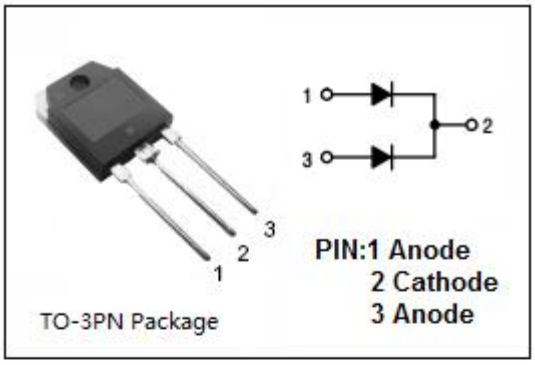
Ultrafast Rectifier

RURG3060CC

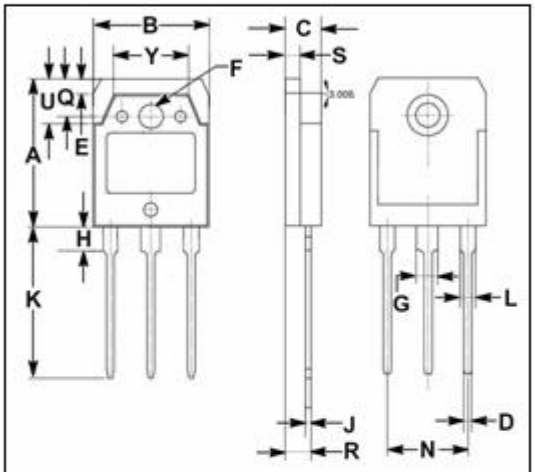


FEATURES

- Ultrafast with soft recovery <55ns
- Operating temperature 175℃
- 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



DIM	mm MIN	mm 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

ABSOLUTE MAXIMUM RATINGS (per leg)Tc=25℃

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℃	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	℃
T_{stg}	Storage Temperature Range	-65~175	℃

Fast Recovery Rectifier RURG3060CC

THERMAL CHARACTERISTICS(per leg)

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.2	℃/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{F*}	Maximum Instantaneous Forward Voltage	I_F= 30A ;Tj=25℃ I_F= 30A ;Tj=150℃	1.5 1.3	V
I_{R*}	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$Tj=25℃ V_R= $V_{RWM;}$Tj=150℃	250 1000	μ A
t_{rr}	Maximum Reverse Recovery Time	IF =1A;	55	ns
t_{rr}	Maximum Reverse Recovery Time	IF =30A;	60	ns

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