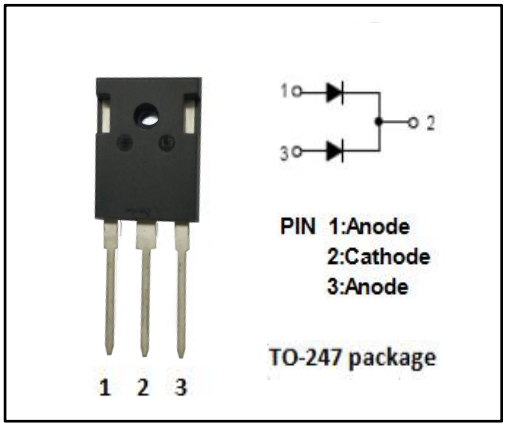
Ultrafast Rectifier HFA30PA60C

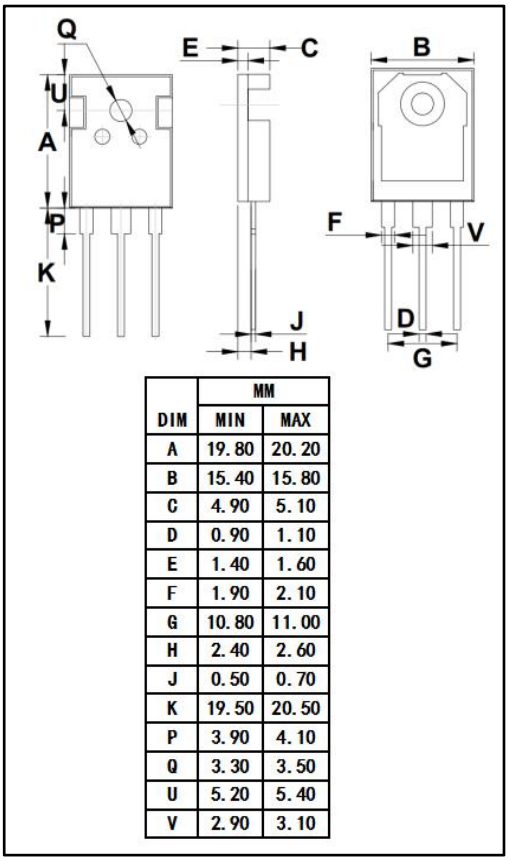
FEATURES

- Ultrafast recovery time
- Very low I_{RRM}
- Popular TO-247 package
- Low forward voltage drop
- 100% avalanche tested
- 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	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

ABSOLUTE MAXIMUM RATINGS(T_a=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 Per Leg Total device	15 30	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
P_D	Maximum power dissipation	74	W
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.7	℃/W

ELECTRICAL CHARACTERISTICS(T_a=25℃) (Pulse Test: Pulse Width=300 μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F=15A ;Tj=25℃	1.7	V
I_R	Maximum Instantaneous Reverse Current	V_R= 0.8V_{RWM};Tj=125℃ V_R= V_{RWM}	1000 10	μA
t_{rr}	Maximum Reverse Recovery Time	IF =0.5A;IR=1.0A, Irr=0.5A	60	ns

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