

Fast Recovery Rectifier

30APF04

FEATURES

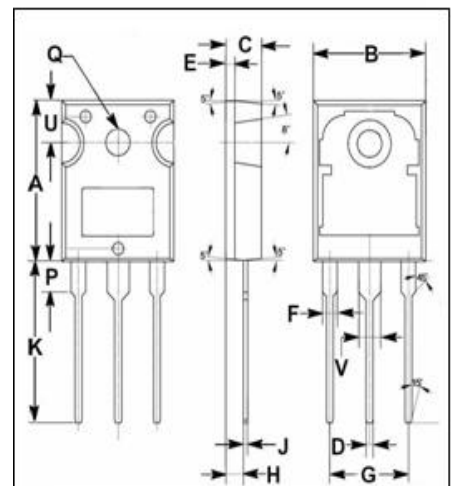
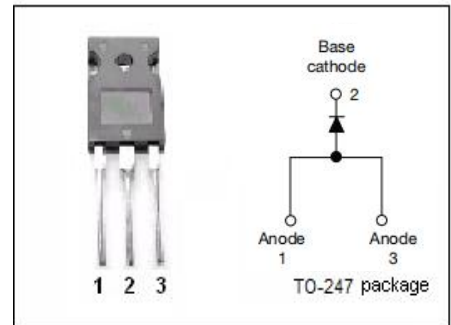
- Fast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 150°C Operating Junction Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in switching power supplies, inverters and as free wheeling diodes.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R)	30	A
I _{FSM}	Non-repetitive Peak Surge Current (Rated V _R applied)	270	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C



DIM	mm	
	MIN	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

Fast Recovery Rectifier**30APF04****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.8	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Instantaneous Forward Voltage	I _F = 30A	1.41	V
I _R	Instantaneous Reverse Current	V _{RRM} = 400V; T _j =25°C	0.1	mA
		V _{RRM} = 400V; T _j =150°C	5	
t _{rr}	Reverse Recovery Time	I _F = 1A; di/dt =200A/us	60	ns

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