

Ultrafast Rectifier
UG2004PT
FEATURES

- Guarding for over voltage protection
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

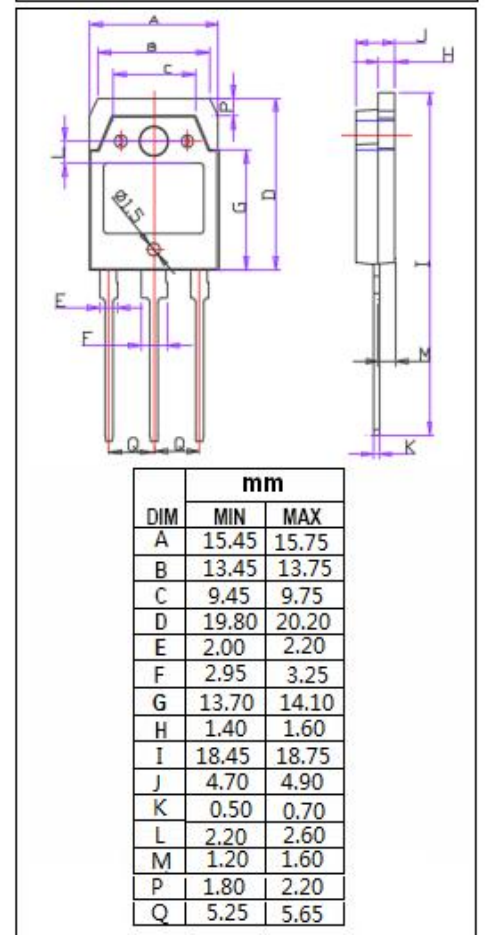
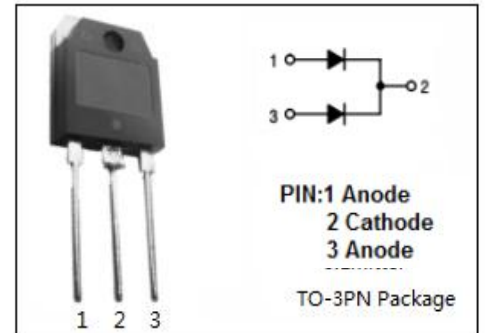
- Switching power supply
- Power switching circuits

ABSOLUTE MAXIMUM RATINGS (T_a=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 Per Leg Total device	10 20	A
I _{FSM}	Nonrepetitive Peak Surge Current, 8.3 ms single half sine-wave superimposed on rated load	200	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.5	°C/W



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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 10A ; T _j =25°C	0.93	V
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ; T _j =25°C	200	μ A
t _{rr}	Maximum Reverse Recovery Time	I _F =0.5A; I _R =1A; I _{rr} =0.25A	25	ns

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