

Ultra fast Rectifier
UG6005PT
FEATURES

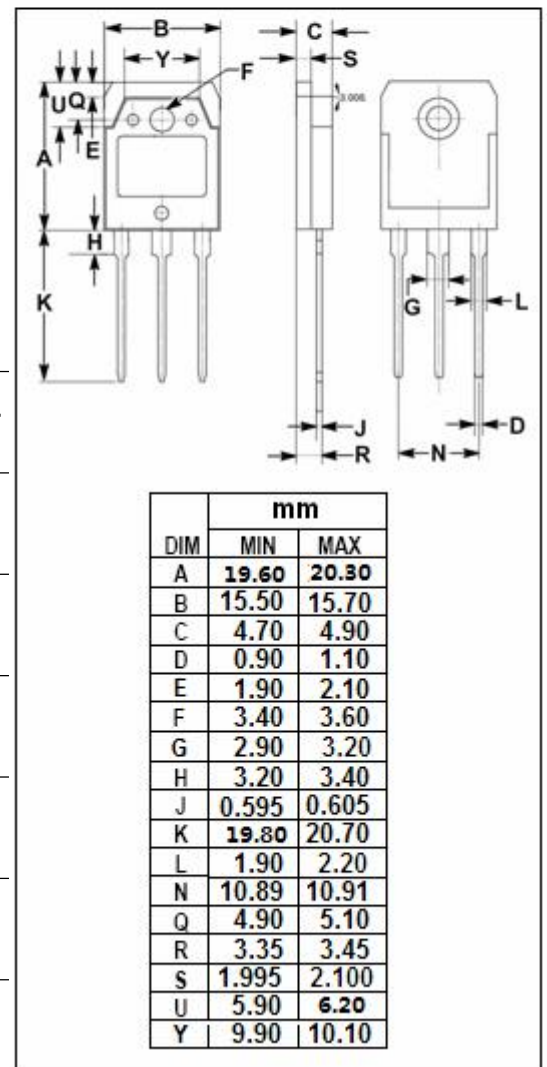
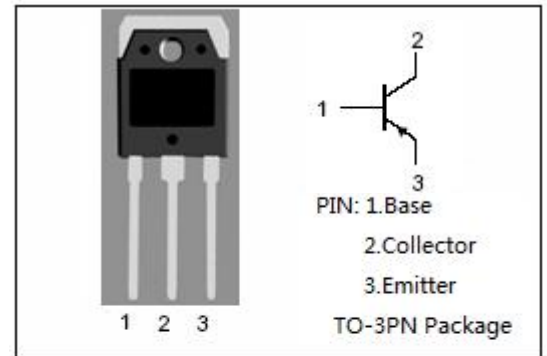
- Super fast recovery time, high voltage
- Low forward voltage, high current capability
- Low thermal resistance
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	300	V
V _{RWM}	Working Peak Reverse Voltage	210	
V _R	DC Blocking Voltage	300	
I _{F(AV)}	Average Rectified Forward Current	60	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	A
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	°C/W

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=30\text{A}; PW=300\ \mu\text{s}$	1.25	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^\circ\text{C}$ $V_R=V_{RWM}; T_j=125^\circ\text{C}$	5 600	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}; I_R=1\text{A}; \text{Recover to } 0.25\text{A}$	35	ns

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