

### **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

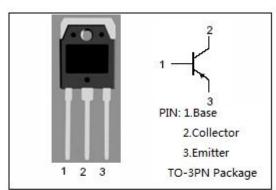


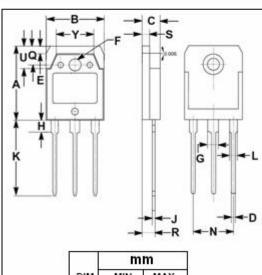
#### **APPLICATIONS**

- Switching power supply
- · Power switching circuits
- · General purpose



SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300 210 300	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	60	А
IFSM	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	Α
TJ	Junction Temperature	-55~175	${\mathbb C}$
T <sub>stg</sub>	Storage Temperature Range	-55~175	$^{\circ}$





mm		
DIM	MIN	MAX
Α	19.60	20.30
В	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
Н	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



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#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case		°C/W

### **ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25℃)** (Pulse Test: Pulse Width=300 µ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> =30A ;PW=300 μ s	1.25	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; Tj = 25 ^{\circ}C$ $V_R = V_{RWM}; Tj = 125 ^{\circ}C$	5 600	μА
t <sub>rr</sub>	Maximum Reverse Recovery Time	IF =0.5A;IR=1A;Recover to 0.25A	35	ns

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