

### **Ultrafast Rectifier**

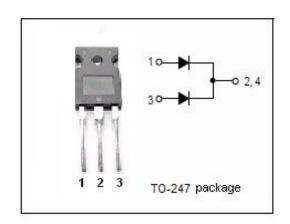
# **DESC60-06A**

### **FEATURES**

- · Very short recovery time
- · Extremely low switching losses
- · Low forward voltage, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

• These devices are ideally suited for HF welding, power converters and other applications where switching losses are not significant portion of the total losses.



## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM	Peak Repetitive Reverse Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	60	Α
I <sub>FSM</sub>	Non-repetitive Peak Surge Current	250	А
$T_J$	Max.Junction Temperature	175	$^{\circ}$
TJ	Max.Junction Temperature	175	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~175	$^{\circ}$

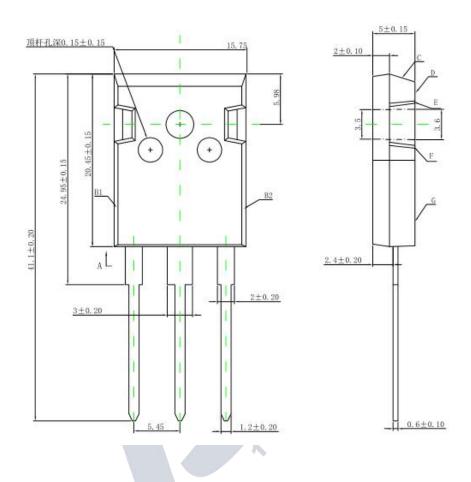
# ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25℃) (Pulse Test: Pulse Width=300 µ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 30A; T <sub>j</sub> =25°C I <sub>F</sub> = 30A; T <sub>j</sub> =150°C	1.6 1.25	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	$V_R=V_{RRM}$ ; $Tj=25$ °C $V_R=V_{RRM}$ ; $Tj=150$ °C	250 1	μA mA
t <sub>rr</sub>	Maximum Reverse Recovery Time	I <sub>F</sub> =1.0A;	35	ns

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### **DIMENSIONAL DRAWING**



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