

# **Ultrafast Rectifier**

# MUR3060WTG

### **FEATURES**

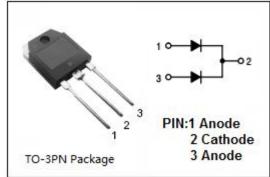
- · Guarding for over voltage protection
- · Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Pb-Free Packages are Available
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

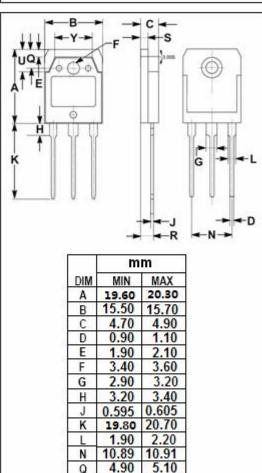
### **APPLICATIONS**

- · Switching power supply
- Rectifier in switch mode supplies

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

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	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current Per Leg Total device	15 30	Α
IFSM	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half- wave, single phase, 60Hz)	150	Α
P <sub>D</sub>	Maximum power dissipation	100	W
TJ	Junction Temperature	175	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-65~175	$^{\circ}$ C





3.35 3.45 1.995 2.100 5.90 6.20 9.90 10.10



## **Ultrafast Rectifier**

# MUR3060WTG

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	1.5	°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> = 15A ;Tj=25 °C I <sub>F</sub> = 15A ;Tj=150 °C	1.7 1.4	V
I <sub>R*</sub>	Maximum Instantaneous Reverse Current	$V_{R}=V_{RWM};Tj=25^{\circ}C$ $V_{R}=V_{RWM};Tj=150^{\circ}C$	10 1000	μ <b>А</b>
t <sub>rr</sub>	Maximum Reverse Recovery Time	IF =1A;	60	ns

<sup>\*:</sup>Pulse Test:Pulse width=300us,duty cycle≤2.0%



ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.