

Ultrafast Rectifier
MUR860G
FEATURES

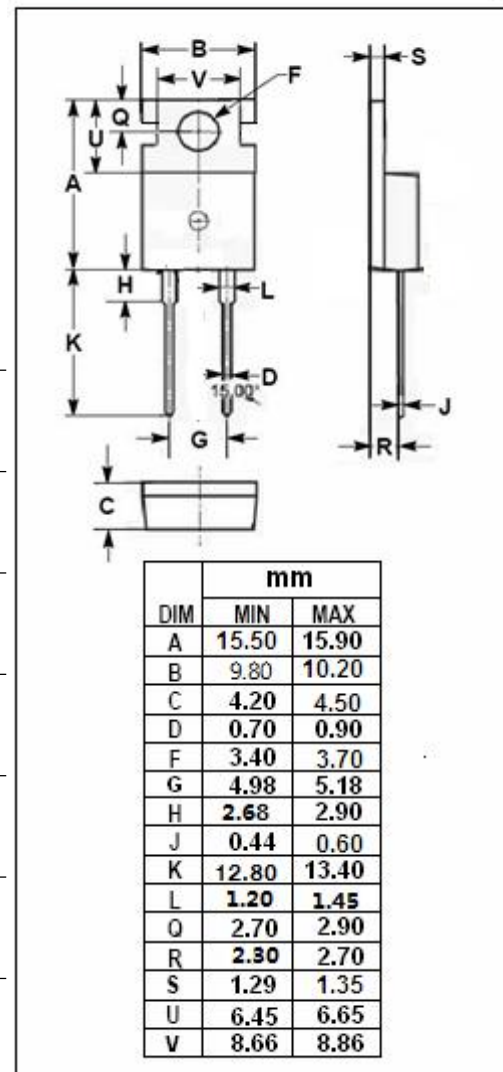
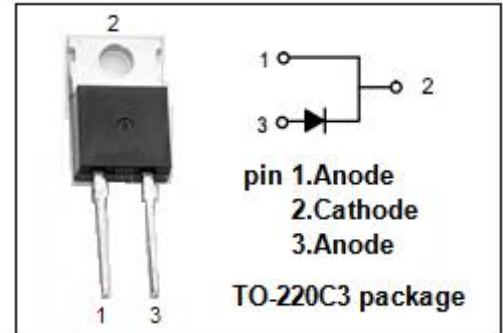
- Guarding for over voltage protection
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Rectifier in switch mode supplies

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _F (AV)	Average Rectified Forward Current	8	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
P _D	Maximum power dissipation	75	W
T _J	Junction Temperature	-40~175	°C
T _{stg}	Storage Temperature Range	-40~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th,j-c}$	Thermal Resistance, Junction to Case	2.0	°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	$I_F=8\text{A}; T_j=25^{\circ}\text{C}$ $I_F=8\text{A}; T_j=150^{\circ}\text{C}$	1.5 1.2	V
I_{R^*}	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}\text{C}$ $V_R=V_{RWM}; T_j=150^{\circ}\text{C}$	10 500	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A};$	60	ns

*:Pulse Test:Pulse width=300us,duty cycle \leq 2.0%

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