

Ultrafast Rectifier

MUR860

FEATURES

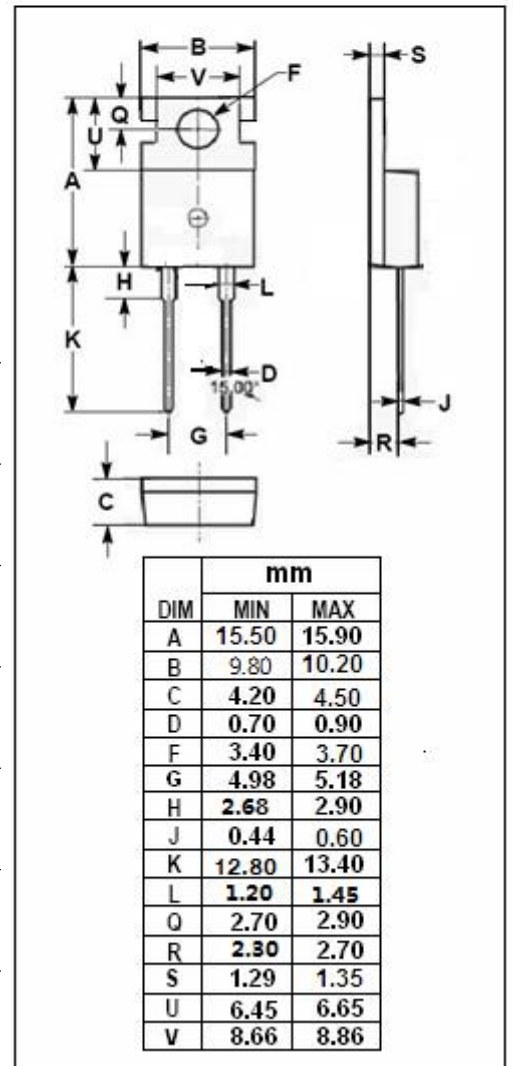
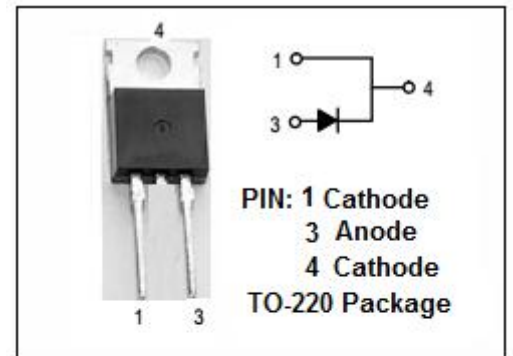
- Ultrafast with soft recovery
- Operating temperature
- Reverse voltage
- Avalanche energy rated
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} 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	-55~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}\text{C}$



Fast Recovery Rectifier

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , 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	$V_R=V_{RWM}; T_j=150^{\circ}\text{C}$ $V_R=V_{RWM}$	500 100	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=200\text{A}/\mu\text{s}$ $I_F=8\text{A}; di/dt=200\text{A}/\mu\text{s}$	60 70	ns

*: Pulse test, Pulse width=300 μs , duty cycle $\leq 2\%$

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