

Ultrafast Recovery Rectifier

MUR860F

FEATURES

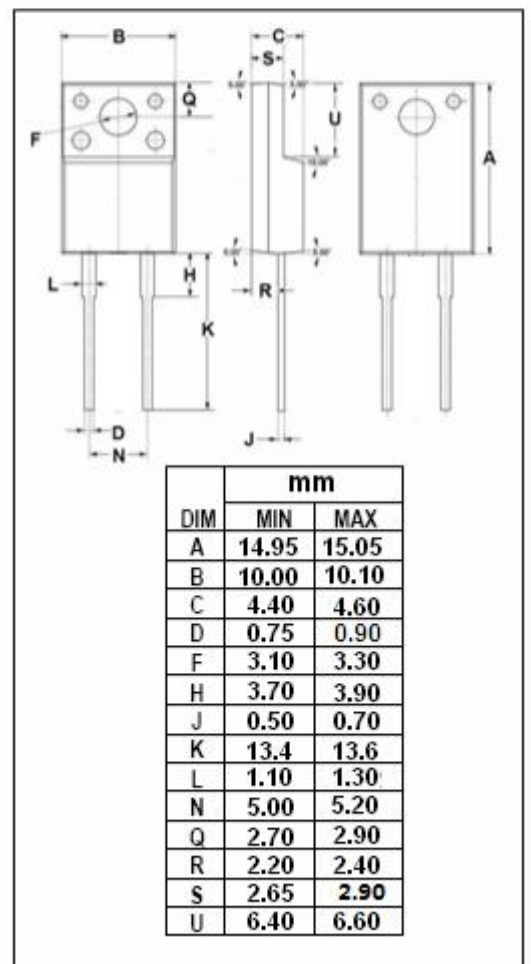
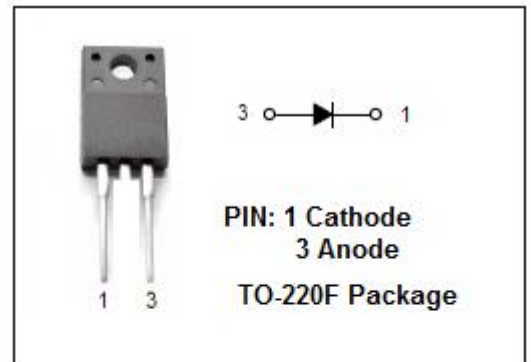
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 150°C Operating Junction Temperature
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supplies
- 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 (Rated V_R)	8	A
I_{FRM}	Peak Repetitive Forward Current (Rated V_R , Square Wave, 20kHz)	16	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
T_J	Junction Temperature	-65~175	°C
T_{stg}	Storage Temperature Range	-65~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	3.0	°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	$I_F=8\text{A}$	1.5	V
		$I_F=8\text{A}, T_c=150^{\circ}\text{C}$	1.2	
I_R	Maximum Instantaneous Reverse Current	$V_{RRM}=600\text{V}$	100	μA
		$V_{RRM}=600\text{V}, T_c=150^{\circ}\text{C}$	500	
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}, di/dt=200\text{A}/\mu\text{s}$	60	ns
		$I_F=8\text{A}, di/dt=200\text{A}/\mu\text{s}$	70	

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

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