

Ultrafast Rectifier

MUR1560G

FEATURES

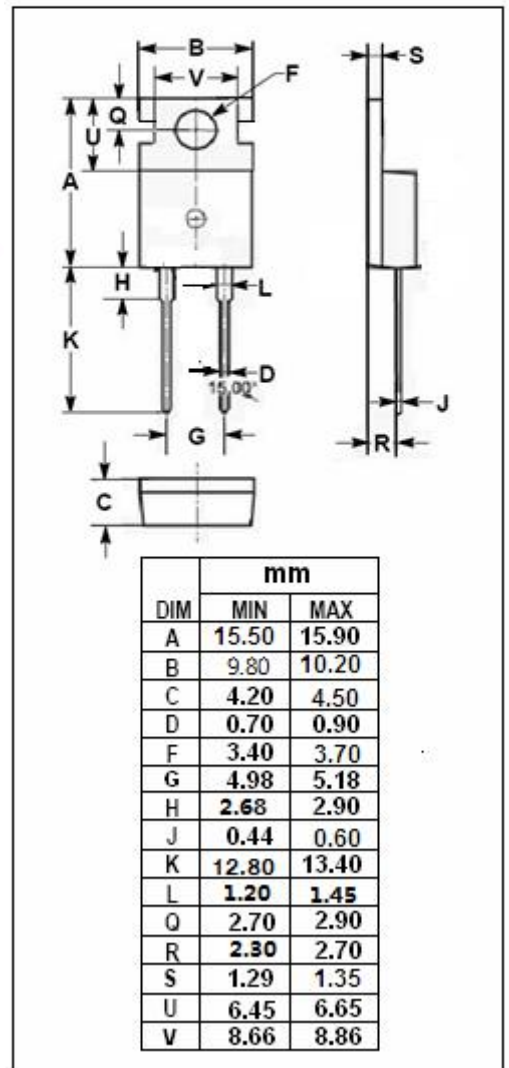
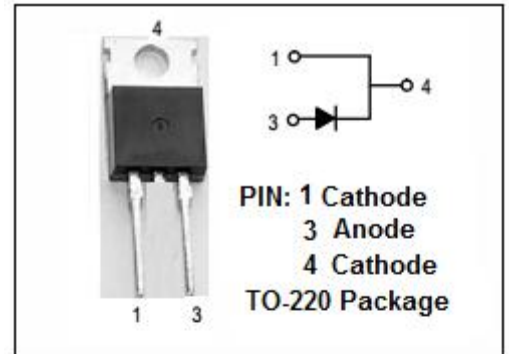
- Ultrafast 35 and 60 nanosecond recovery time
- Popular TO-220 package
- Low forward drop
- Avalanche energy rated
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The MUR1560 is designed for use in switching power Supplies, inverters and as free wheeling diodes.

ABSOLUTE MAXIMUM RATINGS(T_a=25°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 @T _c =145°C	15	A
I _{FRM}	Peak Rectified forward current @T _c =145°C	30	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T _J	Junction Temperature	-65~175	°C
T _{stg}	Storage Temperature Range	-65~175	°C



Ultrafast Rectifier

MUR1560G

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	1.5	$^{\circ}\text{C}/\text{W}$

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	$I_F=15\text{A}; T_j=25^{\circ}\text{C}$ $I_F=15\text{A}; T_j=150^{\circ}\text{C}$	1.5 1.2	V
I_R^*	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=150^{\circ}\text{C}$ $V_R=V_{RWM}$	1000 10	mA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=50\text{A}/\mu\text{s}$	60	ns

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