

Ultrafast Rectifier

MUR1560G

FEATURES

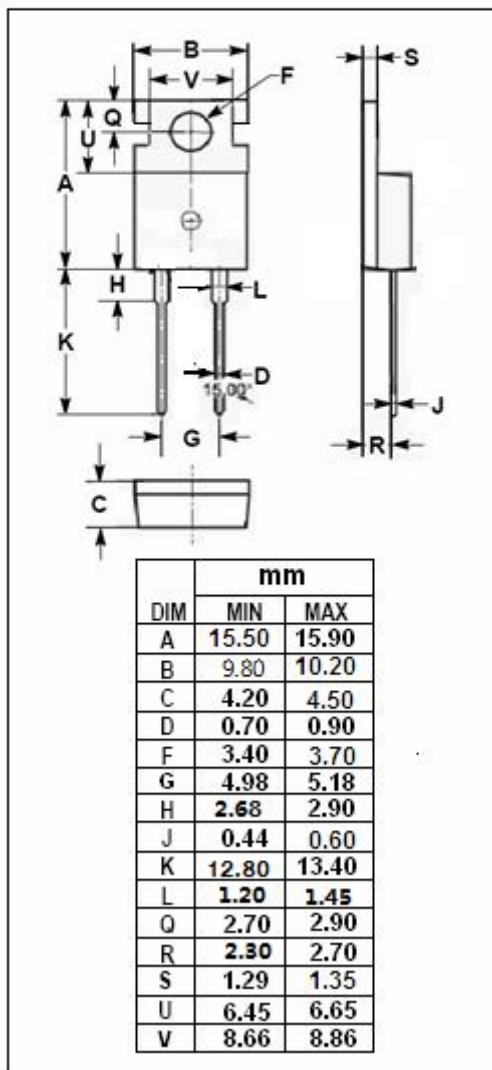
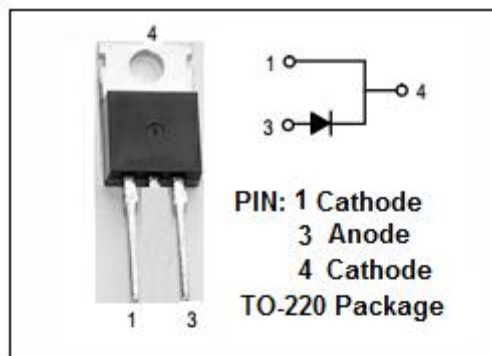
- Ultrafast 35 and 60 nanosecond recovery time
- Popular TO-220 package
- Low forward drop
- Avalanche energy rated
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

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

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 @ $T_c=145^{\circ}\text{C}$	15	A
I_{FRM}	Peak Rectified forward current @ $T_c=145^{\circ}\text{C}$	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	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.5	°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	$I_F=15\text{A}; T_j=25^\circ\text{C}$ $I_F=15\text{A}; T_j=150^\circ\text{C}$	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 μ s, duty cycle $\leq 2\%$

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