

**Ultrafast Rectifier**
**MUR1560**
**FEATURES**

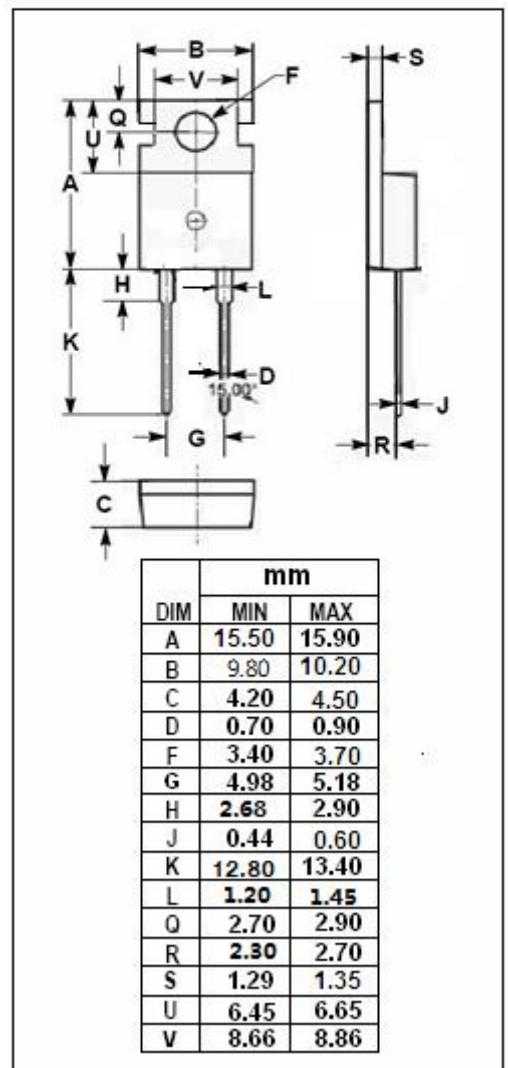
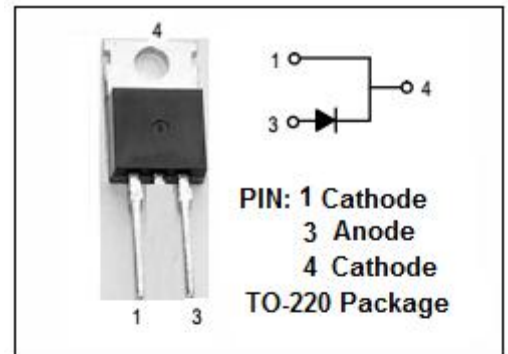
- Ultrafast 35 and 60 nanosecond recovery time
- Popular TO-220 package
- Low forward drop
- Avalanche energy rated
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

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

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>R</sub> RM V <sub>R</sub> WM V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I <sub>F</sub> (AV)	Average Rectified Forward Current	15	A
I <sub>FRM</sub>	Peak Rectified forward current	30	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T <sub>J</sub>	Junction Temperature	-55~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°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  $\mu$ 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	$\mu$ A
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=50\text{A}/\mu\text{s}$	60	ns

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

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