

Ultrafast Rectifier

MUR1520G

FEATURES

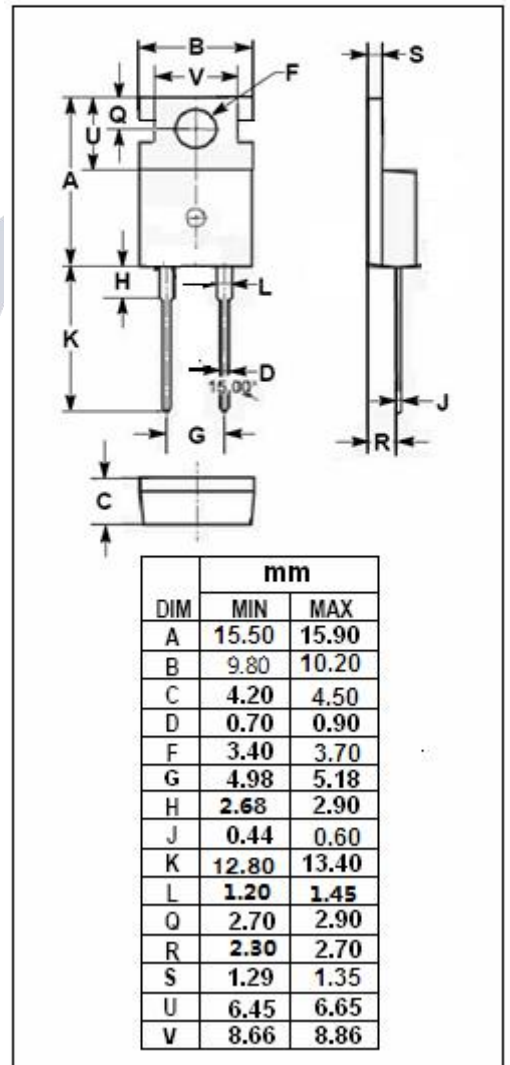
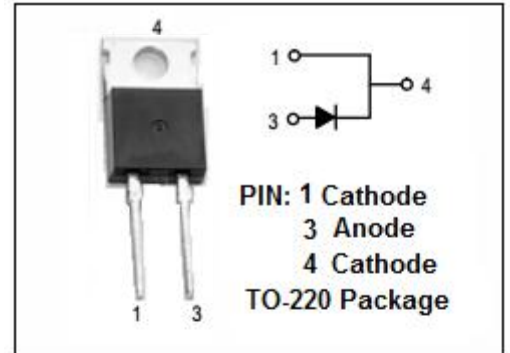
- Ultrafast with soft recovery
- Operating temperature
- Reverse voltage
- Avalanche energy rated
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current	15	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	200	A
P _D	Maximum power dissipation	100	W
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



Ultrafast Rectifier**MUR1520G****THERMAL CHARACTERISTICS**

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

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15A; T_j=25^{\circ}C$ $I_F=15A; T_j=150^{\circ}C$	1.05 0.85	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=150^{\circ}C$ $V_R=V_{RWM}$	500 10	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1A; di/dt=50A/\mu s$	35	ns

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