

Ultrafast Recovery Rectifier
MUR1550
FEATURES

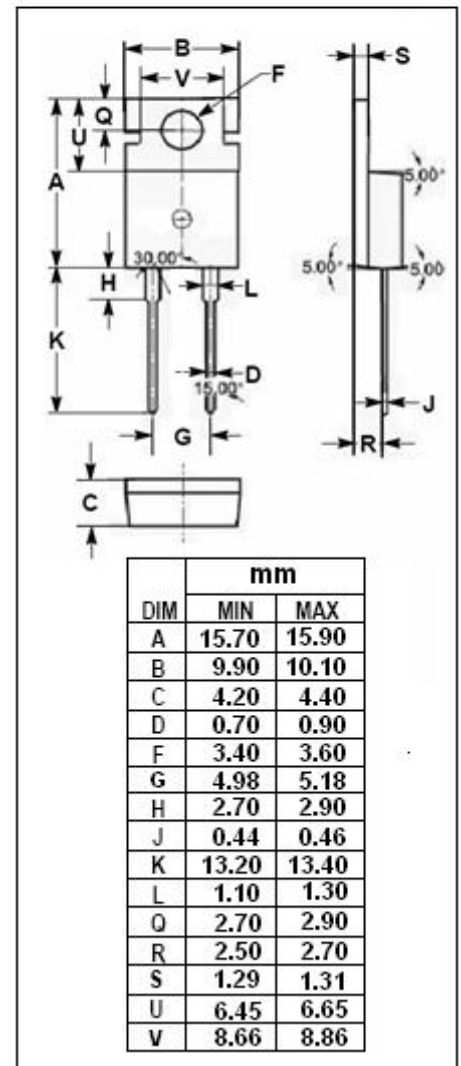
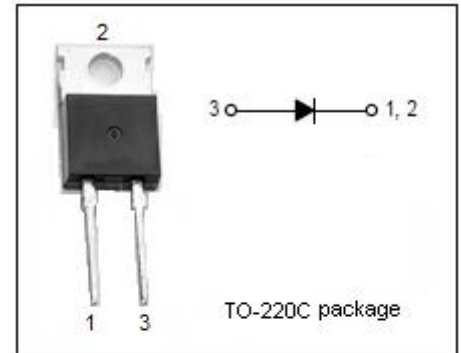
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 175°C Operating Junction Temperature
- High Temperature Glass Passivated Junction
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- 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 _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	500	V
I _F (AV)	Average Rectified Forward Current	15	A
I _{FRM}	Peak Rectified forward current	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



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.5	°C/W

ELECTRICAL CHARACTERISTICS (T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle ≤ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _{F*}	Maximum Instantaneous Forward Voltage	I _F =15A ; T _j =25°C I _F = 15A ; T _j =150°C	1.5 1.2	V
I _{R*}	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ; T _j =150°C V _R = V _{RWM}	1000 10	μA
t _{rr}	Maximum Reverse Recovery Time	I _F =1A; di/dt = 50A/μs	60	ns

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

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