

Ultrafast Rectifier
MUR1630CT
FEATURES

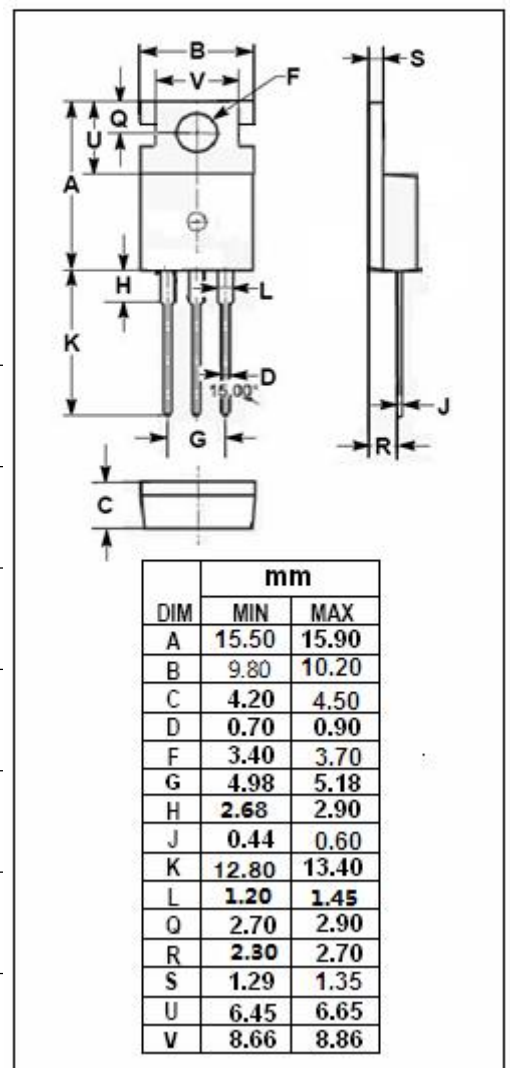
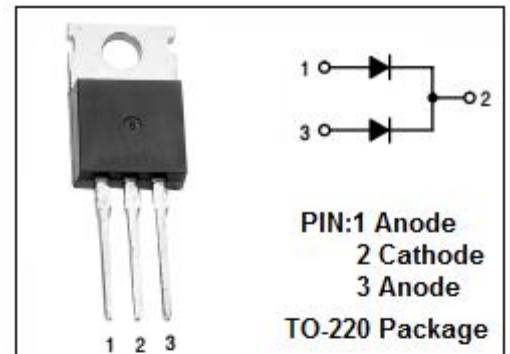
- Ultrafast with soft recovery
- 175°C Operating temperature
- Popular TO-220 package
- Avalanche energy rated
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RFWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
I _{F(AV)}	Average Rectified Forward Current Per Leg Total device	8 16	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
P _D	Maximum power dissipation	75	W
T _J	Junction Temperature	-65~175	°C
T _{stg}	Storage Temperature Range	-65~175	°C



Fast Recovery Rectifier

MUR1630CT

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	°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	$I_F=8\text{A}; T_j=25^\circ\text{C}$ $I_F=8\text{A}; T_j=150^\circ\text{C}$	1.3 1.0	V
I_R^*	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=150^\circ\text{C}$ $V_R=V_{RWM}$	500 10	μ 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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