

Ultrafast Rectifier

MUR1040CT

FEATURES

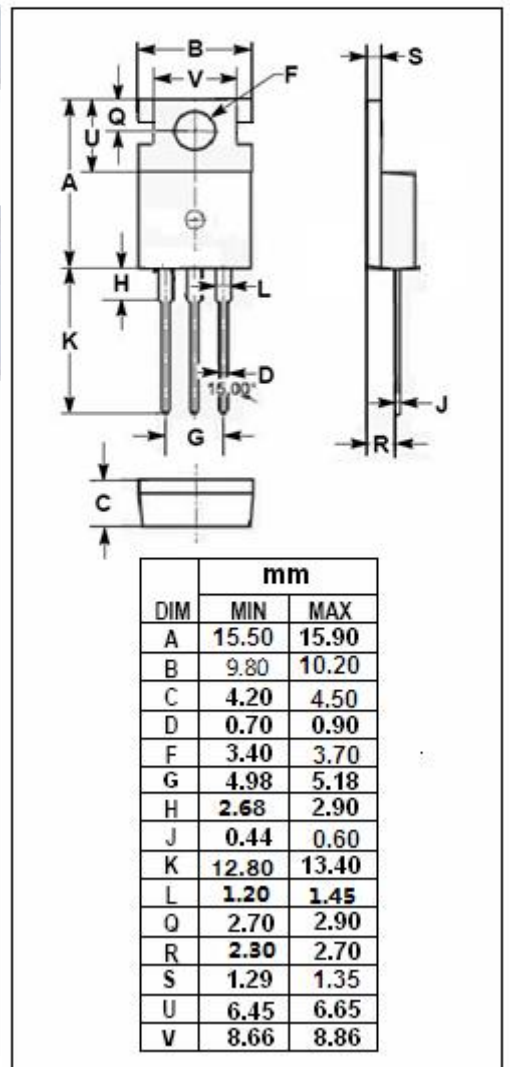
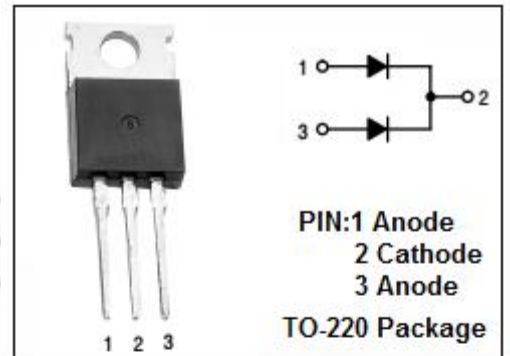
- High current capability
- Low forward voltage drop
- Low power loss,high efficiency
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Dual center tap rectifier suited for switched mode power supplies and high frequency DC to DC converters

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	400	V
I _{F(AV)}	Average Rectified Forward Current	10	A
I _{FSM}	Nonrepetitive Peak Surge Current	100	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



Fast Recovery Rectifier

MUR1040CT

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.0	$^{\circ}\text{C}/\text{W}$

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	$I_F=5\text{A}; T_j=25^{\circ}\text{C}$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=125^{\circ}\text{C}$ $V_R=V_{RWM}$	250 10	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{rr}=0.25\text{A}$	50	ns