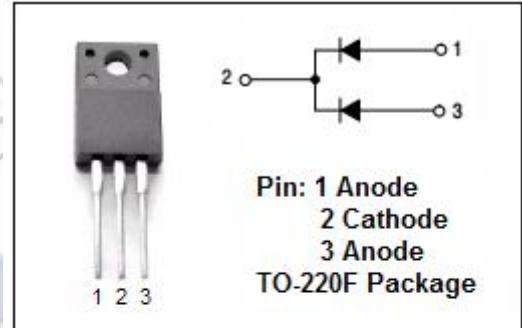


Ultrafast Rectifier

MURF1660CT

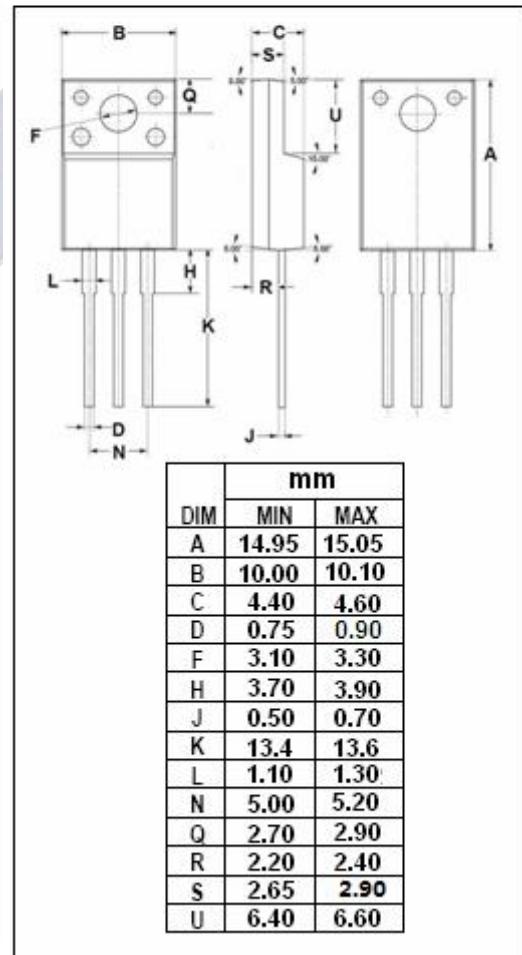
FEATURES

- Very short recovery time
- Soft recovery behaviour
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Antiparallel diode for high frequency switching devices
- Antisaturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits



ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage		
V_{RWM}	Working Peak Reverse Voltage	600	V
V_R	DC Blocking Voltage		
$I_{F(AV)}$	Average Rectified Forward Current	16	A
I_{FSM}	Nonrepetitive Peak Surge Current@ 45°C (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
T_J	Junction Temperature	-40~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$

Fast Recovery Rectifier**MURF1660CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	3.0	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F^*	Maximum Instantaneous Forward Voltage	$I_F=8A; T_j=25^\circ C$ $I_F=8A; T_j=150^\circ C$	1.5 1.2	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	$I_F = 0.5A; I_R = 1A; I_{rr} = 0.25A$	50	ns