

# Ultra fast Rectifier

# MUR1060F

## FEATURES

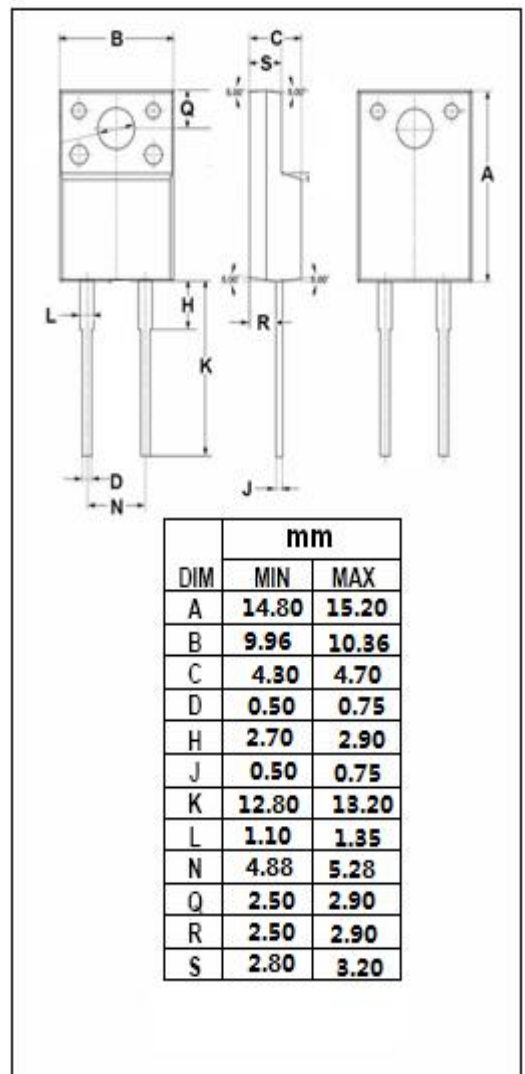
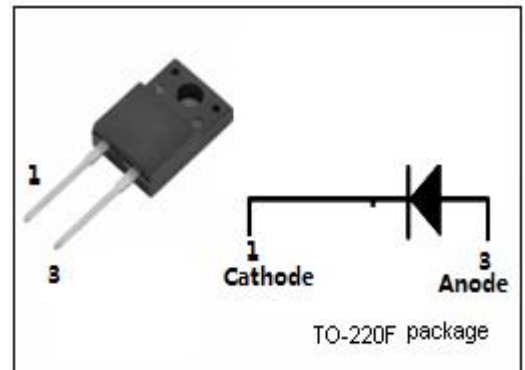
- With TO-220F packaging
- Ultra low forward voltage
- Low switching loss
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching power supply
- Power switching circuits
- General rectification

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

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage $t_w=500\text{ns}; \text{duty}=1/40$	600	V
IF(AV)	Average Rectified Forward Current @ $T_c=75^{\circ}\text{C}$	10	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions; One shot	125	A
TJ	Junction Temperature	-55~150	$^{\circ}\text{C}$
Tstg	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{thj-c}$	Thermal Resistance, Junction to Case	2.5	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}$	1.5	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM};$ $V_R=V_{RWM}; T_J=100^{\circ}\text{C}$	10 500	$\mu$ A
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=0.5\text{A}; I_R=1\text{A}, I_{RR}=0.25\text{A}$	50	ns

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