

Ultra fast Rectifier
RFNL5TJ6S
FEATURES

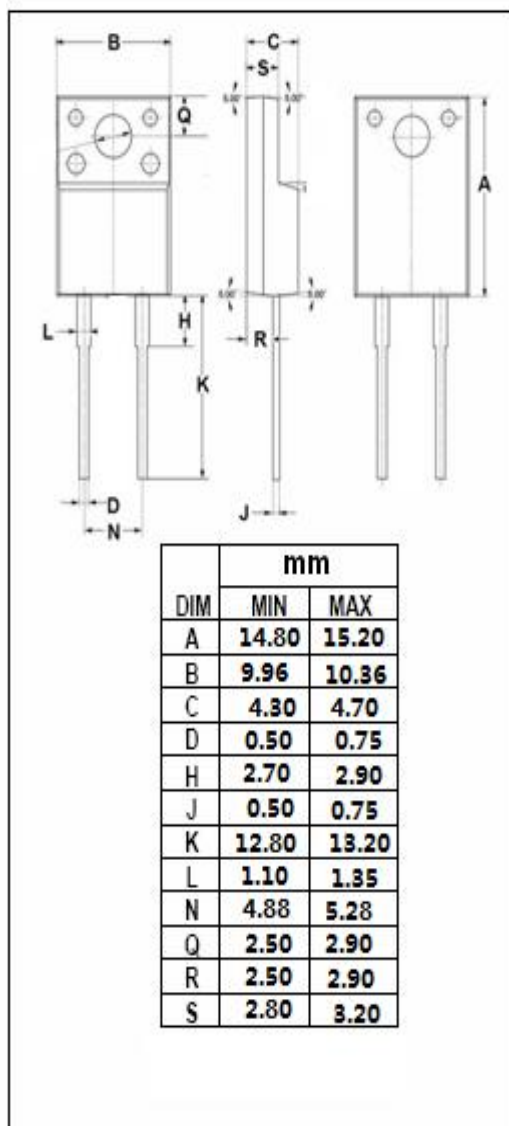
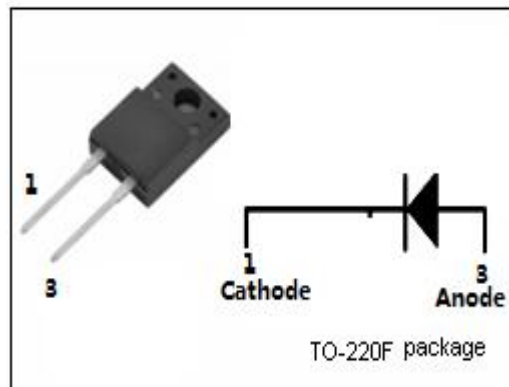
- With TO-220 packaging
- Ultra low forward voltage
- Low switching loss
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General rectification

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM	Peak Repetitive Reverse Voltage	600	V
VRWM	Working Peak Reverse Voltage	600	
VR	DC Blocking Voltage tw=500ns;duty=1/40	600	
IF(AV)	Average Rectified Forward Current @T _c =100°C	5	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions;One shot	50	A
TJ	Junction Temperature	-55~150	°C
Tstg	Storage Temperature Range	-55~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	4.0	°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	$I_F=5\text{A}$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM};$ $V_R=V_{RWM}; T_J=150^{\circ}\text{C}$	10 200	mA
t_{rr}	Maximum Reverse Recovery Time	$I_F=5\text{A}; dI_F/dt=100\text{A/ms}$	175	ns

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