

Ultra fast Rectifier
SF10LC20U
FEATURES

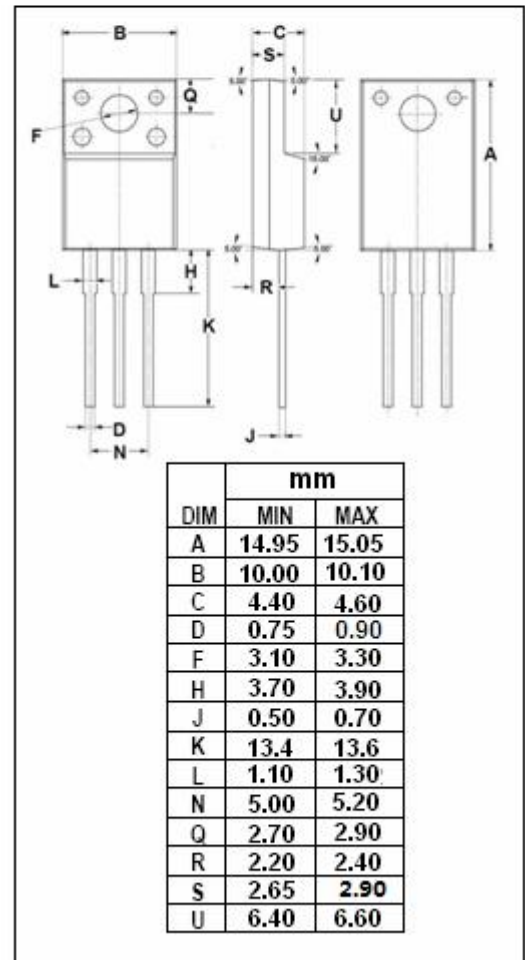
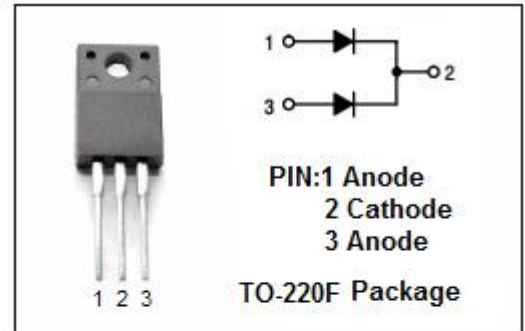
- Ultrafast with soft recovery
- 150°C operating temperature
- Popular TO-220F package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- General purpose

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current	10	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	80	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.3	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=5A; T_j=25^{\circ}C$	0.98	V
I_R	Maximum Instantaneous Reverse Current	$V_R=200V; T_j=25^{\circ}C$	10	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5A; I_R=1A$	35	ns

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