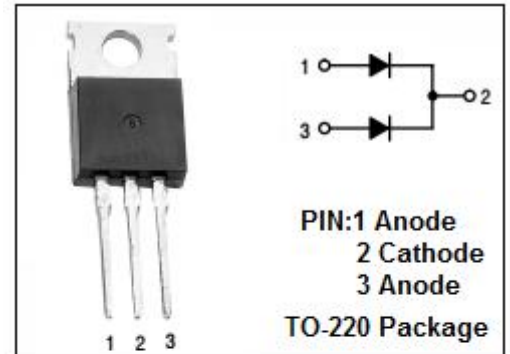


Fast Recovery Rectifier
SF2008
FEATURES

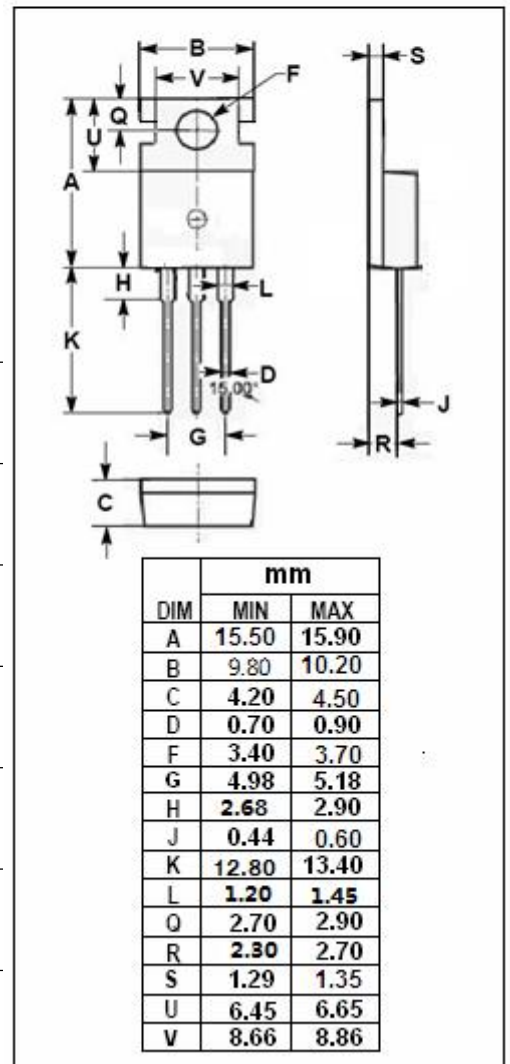
- Ultrafast Recovery
- Soft Recovery Characteristics
- Low Forward Voltage
- Low Leakage Current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching Mode Power Supply
- Power Switching Circuits
- Freewheeling, Rectifier, Clamp


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _{F(AV)}	Maximum Average Forward Rectified Current @TC = 100 °C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
P _D	Maximum power dissipation	50	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



Fast Recovery Rectifier
SF2008
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^{\circ}C/W$

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	$I_F=10A ; T_j=25^{\circ}C$	1.7	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=100^{\circ}C$ $V_R=V_{RWM}$	400 5	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=1A; di/dt=-200A/\mu s$	35	ns

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