

Ultra fast Rectifier
SF1608CT
FEATURES

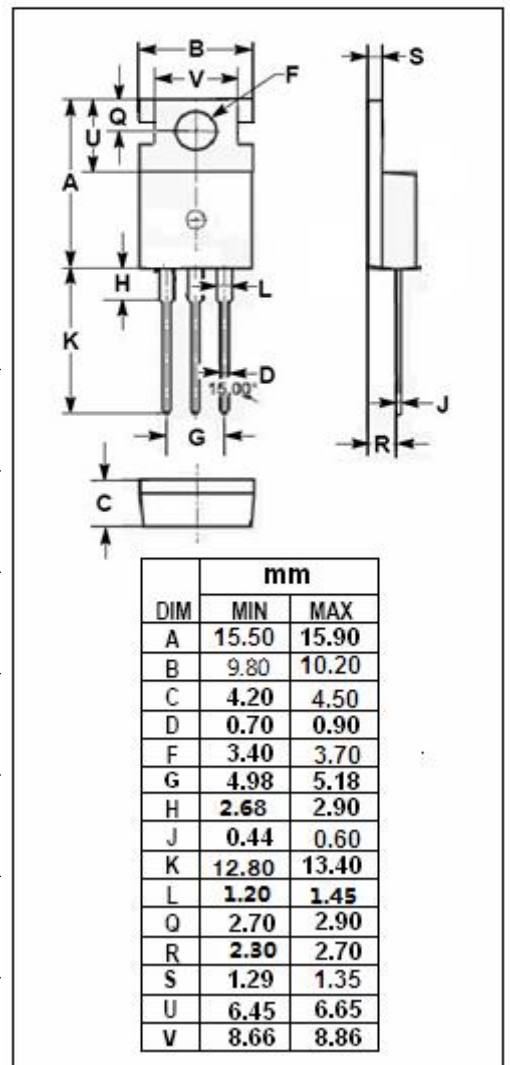
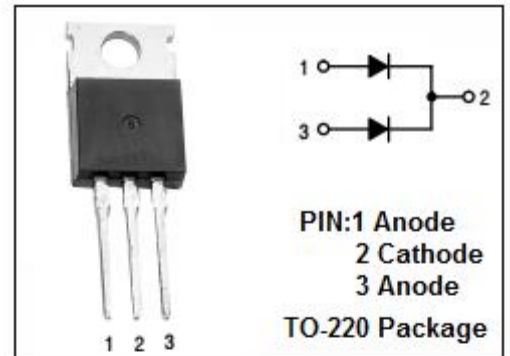
- Super fast switching time for high efficiency
- Low forward voltage drop High current capability
- Low reverse leakage current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	600	V
V _{RWM}	Working Peak Reverse Voltage	420	
V _R	DC Blocking Voltage	600	
I _{F(AV)}	Average Rectified Forward Current T _c =75°C	16	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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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	$I_F=8A ; T_j=25^{\circ}C$	1.3	V
I_{R^*}	Maximum Instantaneous Reverse Current	$V_R= V_{RWM}; T_j=25^{\circ}C$ $V_R= V_{RWM}; T_j=100^{\circ}C$	10 150	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5A, I_R=1A, I_{RR}=0.25A$	50	ns

*:Pulse test ,Pulse width=300us,duty cycle \leq 2%

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