

Ultrafast Recovery Rectifier
STTH8S06FP
FEATURES

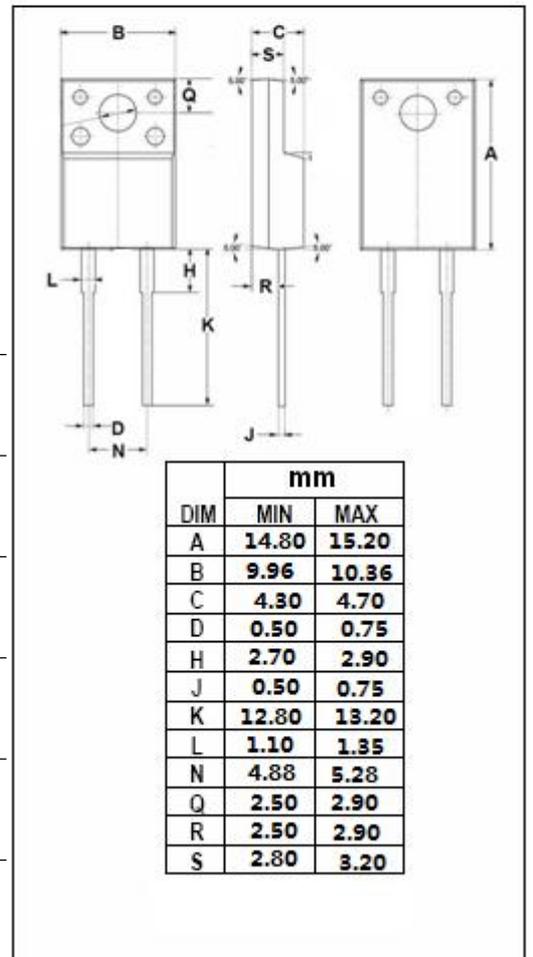
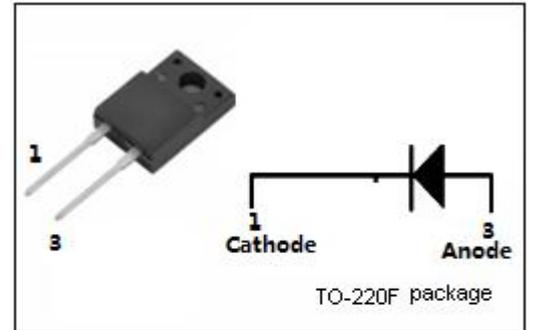
- Low forward voltage drop
- High Current Capability
- High reliability
- High surge Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in power supplies and power conversions System, motor drive, and other power applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{VRWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R)	8	A
I _{FSM}	Non repetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	60	A
T _J	Max. Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-65~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.5	°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	Instantaneous Forward Voltage 	$I_F=8\text{A}$ $I_F=8\text{A}; T_J=125^\circ\text{C}$	3.4 1.9	V
I_R	Instantaneous Reverse Current	$V_{RRM}=600\text{V}$ $V_{RRM}=600\text{V}; T_J=125^\circ\text{C}$	20 200	μ A
t_{rr}	Reverse Recovery Time	$I_F=1\text{A}$	18	ns

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