

Ultrafast Rectifier
STTH1602CG
FEATURES

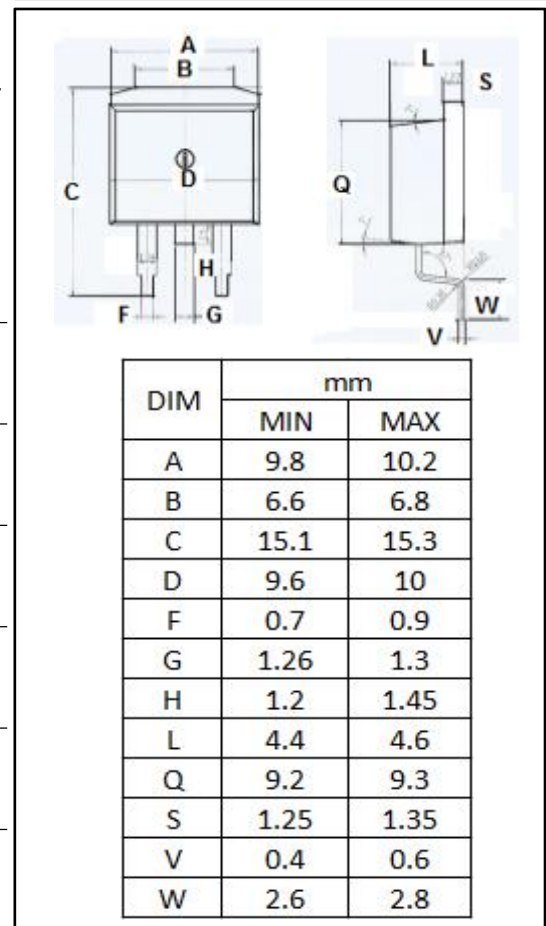
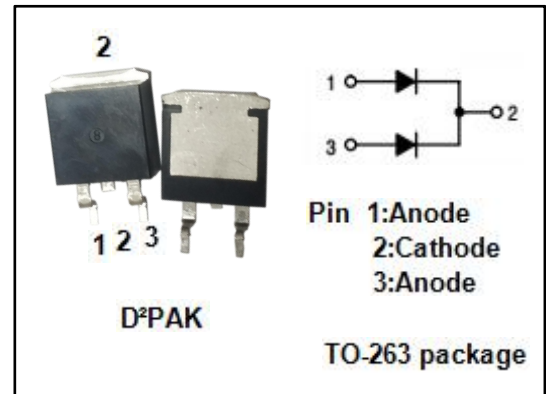
- Low forward and reverse recovery times
- Low leakage current
- High junction temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The STTH1602CG is designed for use in switching power Supplies, inverters and as free wheeling diodes.

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	200	V
I _{F(AV)}	Average Rectified Forward Current (Per Leg) (Total)	8 16	A
I _{FSM}	Nonrepetitive Peak Surge Current	80	A
T _J	Junction Temperature	-65~175	°C
T _{stg}	Storage Temperature Range	-65~175	°C



Fast Recovery Rectifier

STTH1602CG

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	3.0	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=8\text{A}; T_j=25^{\circ}\text{C}$	1.1	V
		$I_F=8\text{A}; T_j=150^{\circ}\text{C}$	1.25	
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}\text{C}$	60	μA
		$V_R=V_{RWM}; T_j=150^{\circ}\text{C}$	60	
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=50\text{A}/\mu\text{s}$	26	ns

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