

Hight frequency secondary rectifier

STTH2003CT

FEATURES

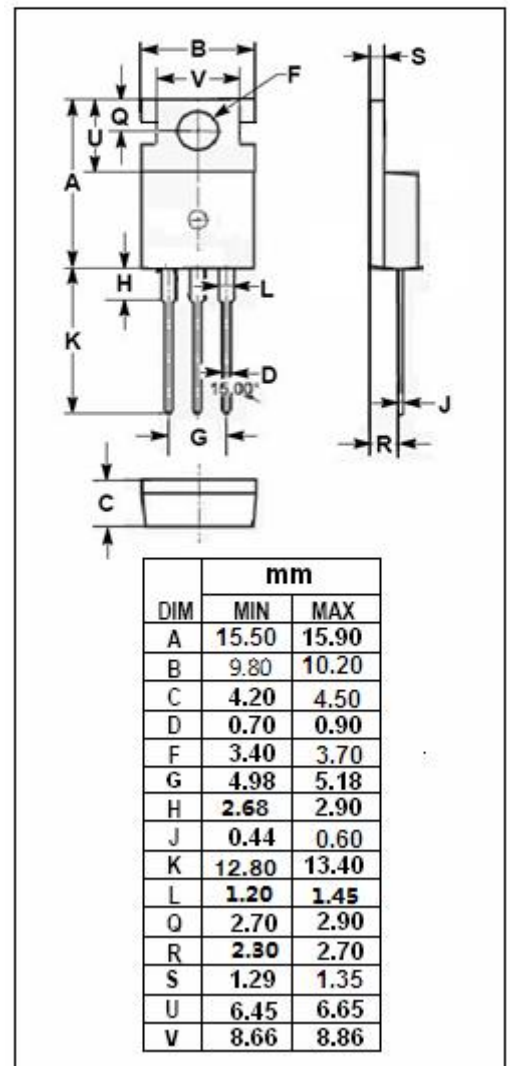
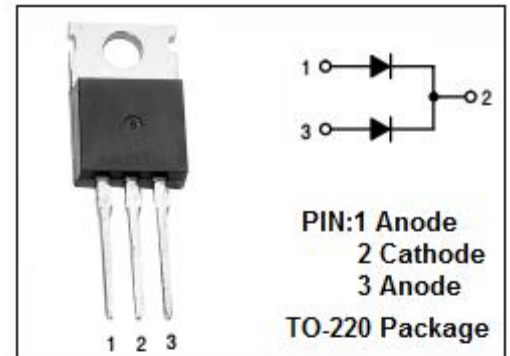
- Guarding for over voltage protection
- Combines highest recovery and reverse voltage performance
- Ultra-fast, soft and noise-free recovery
- Low forward voltage,high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
$I_{F(AV)}$	Average Rectified Forward Current Per Leg Total	10 20	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	110	A
T_J	Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65-175	$^\circ\text{C}$



Hight frequency secondary rectifier**STTH2003CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance,Junction to Case	2.5	°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	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}; T_j=25^{\circ}\text{C}$	1.25	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=125^{\circ}\text{C}$ $V_R=V_{RWM}$	300 20	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A};$	35	ns

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