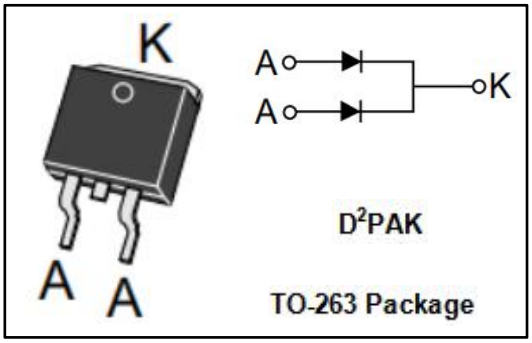
Ultrafast Rectifier STTH2002CG

FEATURES

- Super fast switching for high efficiency.
- Low reverse leakage.
- High forward surge current capability.
- 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℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} 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 device	10 20	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	90	A
P_D	Maximum power dissipation	75	W
T_J	Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature Range	-55~175	℃

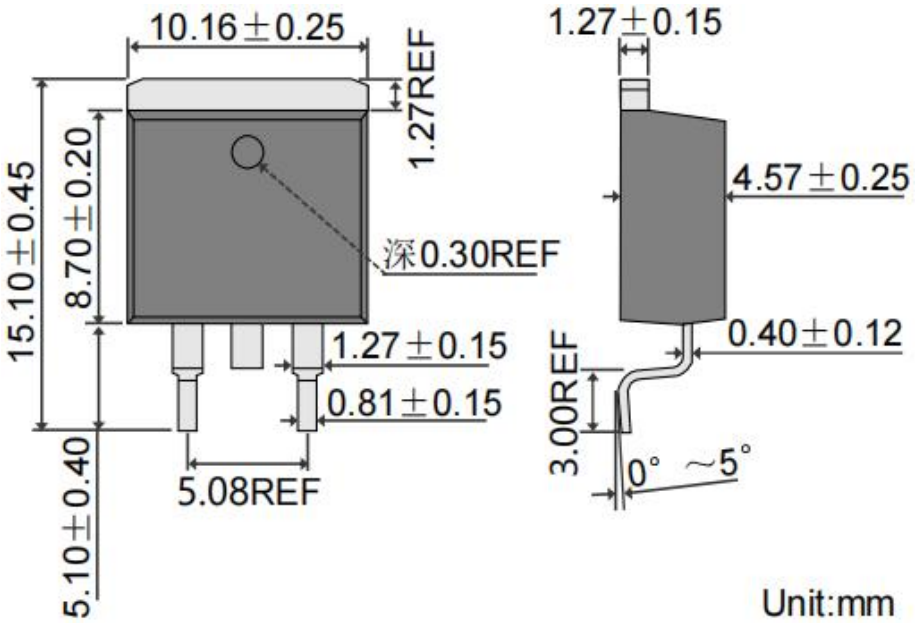
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	2.0	℃/W

Fast Recovery Rectifier STTH2002CG

ELECTRICAL CHARACTERISTICS(T_a=25℃) (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F=10A ;Tj= 25℃ I_F= 10A ;Tj= 125℃	1.1 0.95	V
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$ V_R= $V_{RWM,}$ Tj=125℃	10 100	μ A
t_{rr}	Maximum Reverse Recovery Time	I_F=0.5A I_R=1.0A I_{REC}=0.25A	25	ns



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