

**Ultrafast Recovery Rectifier**
**STTH1512GY**
**FEATURES**

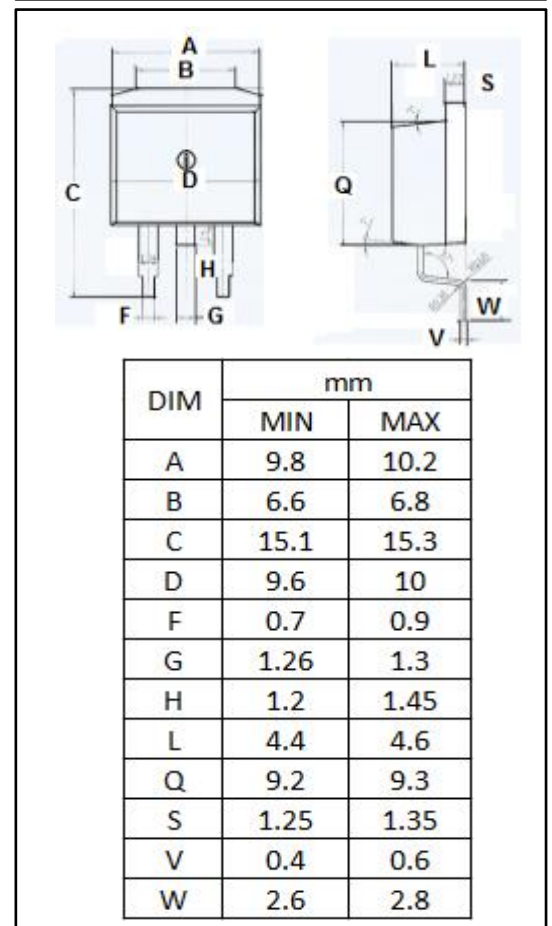
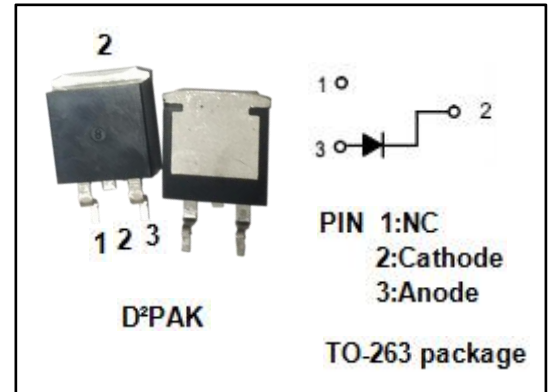
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 175°C Operating Junction Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supplies
- Power switching circuits
- General purpose

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	1200	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> )	15	A
I <sub>F(RMS)</sub>	RMS forward current	50	A
T <sub>J</sub>	Junction Temperature	-65~175	°C
T <sub>stg</sub>	Storage Temperature Range	-65~175	°C



## Ultrafast Recovery Rectifier

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## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.3	°C/W

## ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F*</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 15A , T <sub>c</sub> =25°C	2.1	V
		I <sub>F</sub> = 15A , T <sub>c</sub> =150°C	1.9	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>RRM</sub> = 1200V, T <sub>c</sub> =25°C	15	μ A
		V <sub>RRM</sub> = 1200V , T <sub>c</sub> =150°C	100	
t <sub>rr</sub>	Maximum Reverse Recovery Time	I <sub>F</sub> = 1 A, V <sub>R</sub> =30V, d I <sub>F</sub> /dt= -100 A/us, T <sub>j</sub> = 25° C	75	ns

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

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