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## 6H & 8H Triacs

To increase AC Power Density



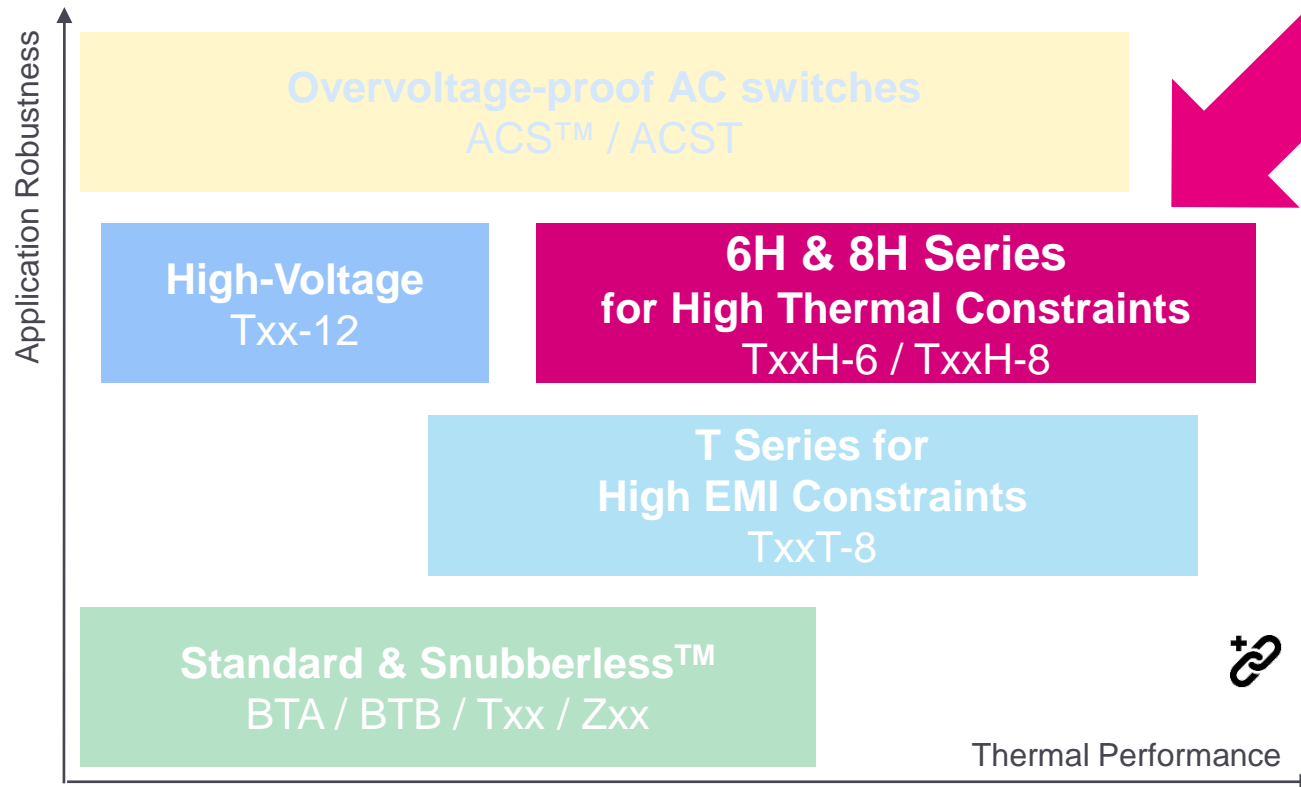
Discrete and Filter Division

Automotive and Discrete Group



# 6H & 8H Triacs

The most complete range of triacs and AC switches



**Bidirectional  
Conducting**



**H-series**

**Electrical specifications:**

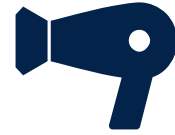
- $V_{DRM}$ : 600 to 800 V
- $I_{T(RMS)}$ : 6 to 30 A
- $I_{GT}$ : 10 to 50 mA
- $T_{Jmax}$ : 150 °C





# 6H & 8H Triac applications

## High-end Appliances

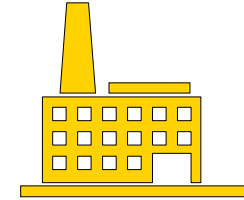


Hair Dryer

Coffee Maker

Food Processor

IO Control



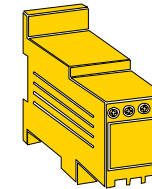
Lighting Control



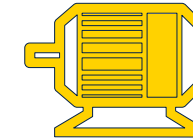
Water Heater



AC Motor Control



Motor Soft Starter



## Industry 4.0

## Building Automation

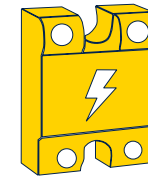


Gate Opener

Roller Shutter

Smart Plug

Solid State Relay



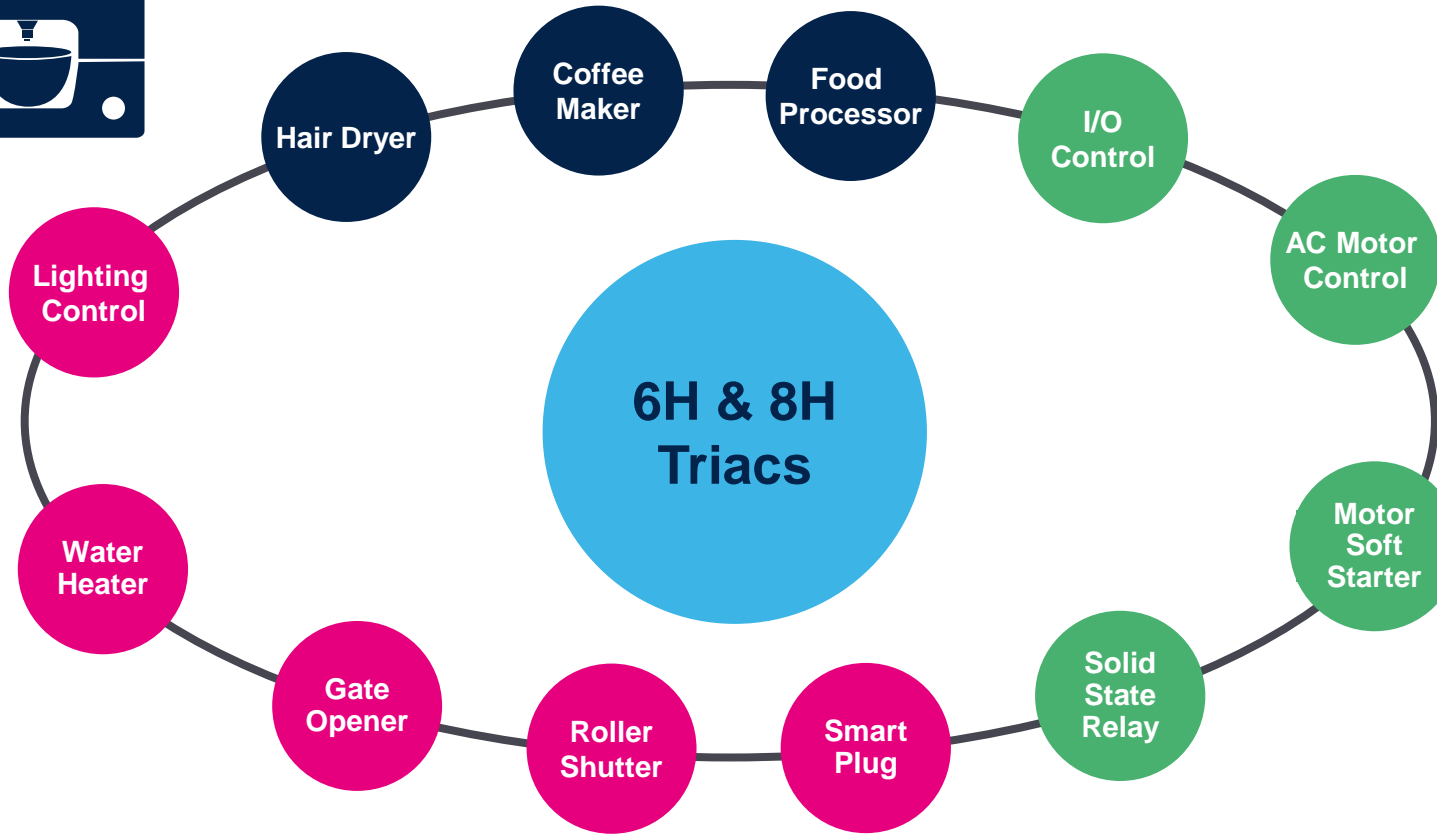
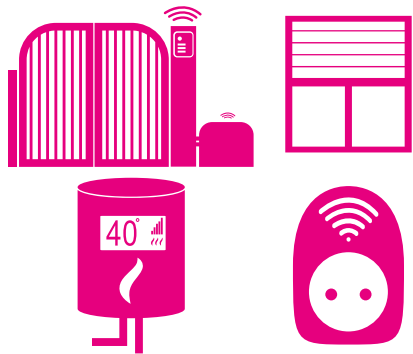


# 6H & 8H Triac applications

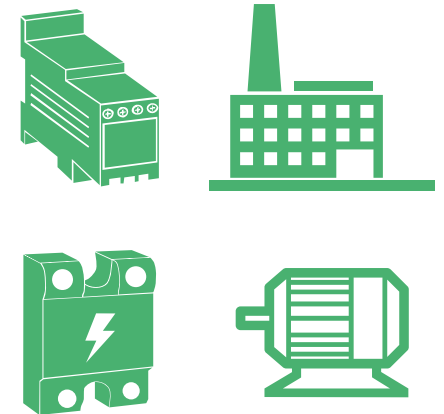
## High-end Appliances



## Building Automation



## Industry 4.0





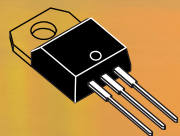
# Key benefits of 6H & 8H Triacs

Maximize current density and reduce heatsink size by 50%

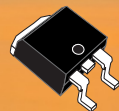
High noise immunity up to 6kV in application

Control 6-30A load at higher case temperature

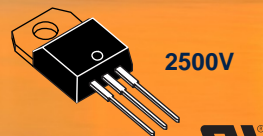
Full rating: 800V and 150°C reliable operation



TO-220AB



D<sup>2</sup>PAK



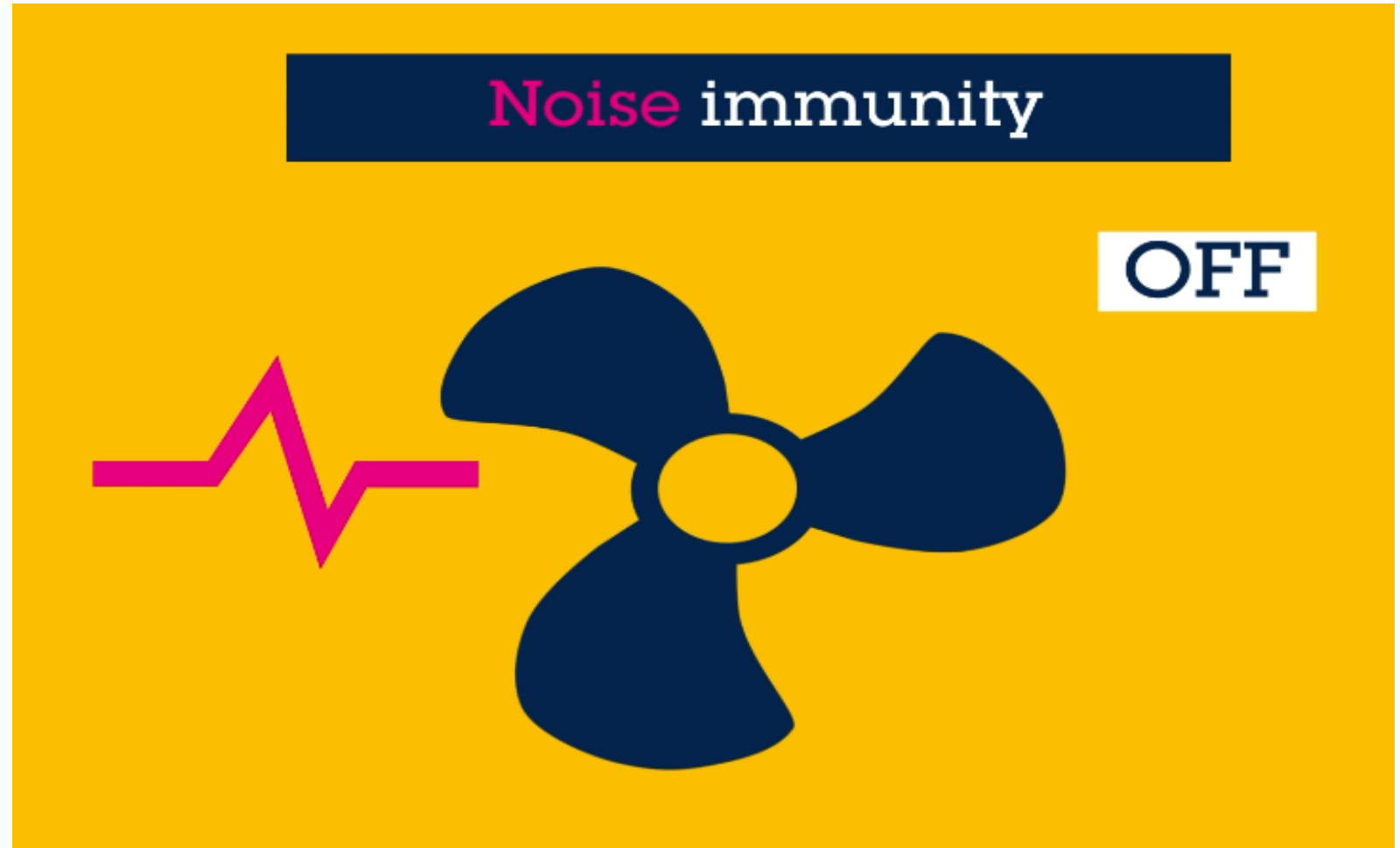
TO-220AB Ins.



# Increase functional robustness

**Robust dynamic  
turn-off  
commutation at  
150°C**

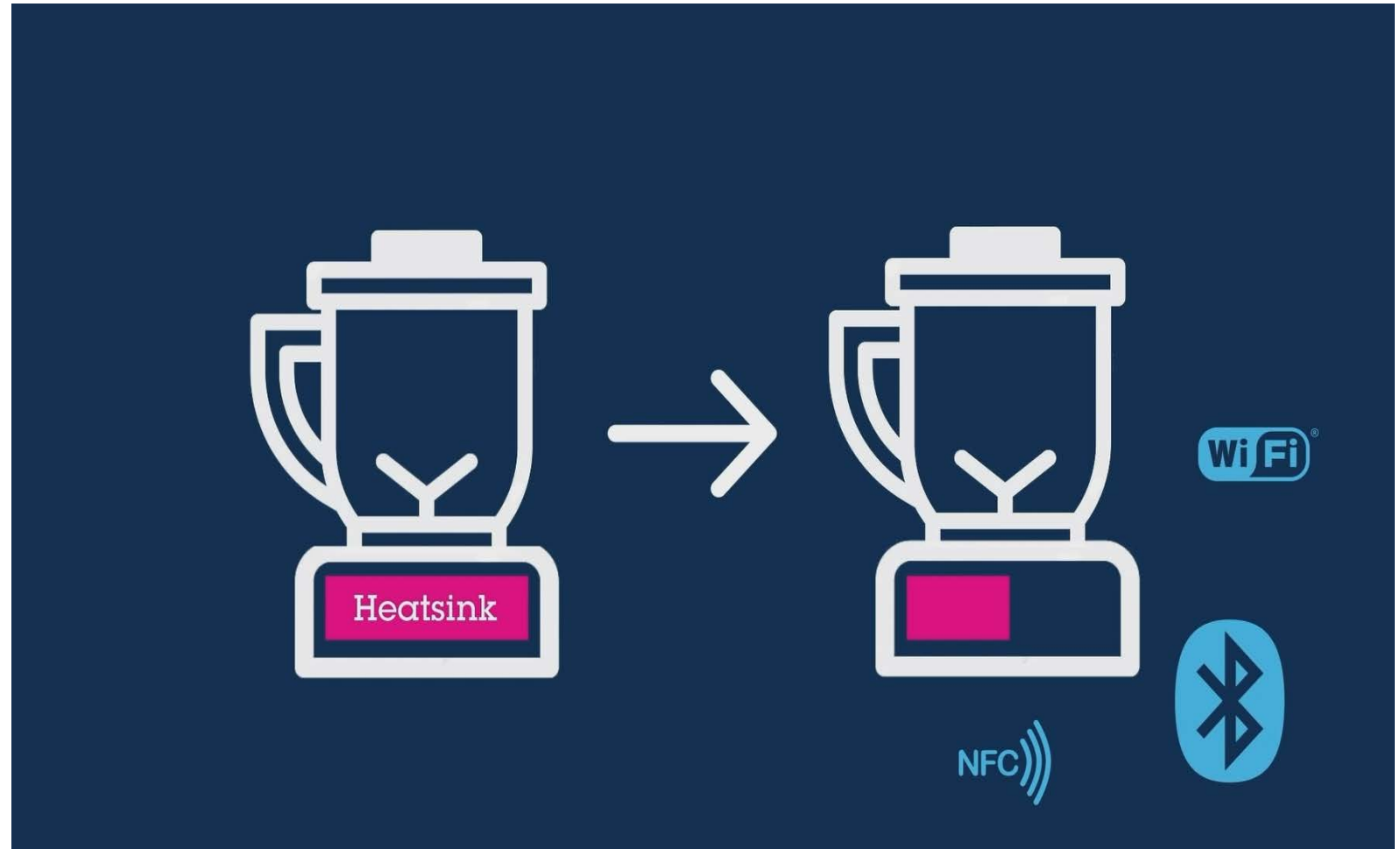
**High noise  
immunity at 150°C  
–  
static dV/dt**





# Heatsink size reduction

Free up  
space for  
additional  
features





# 800V blocking voltage with 8H Triacs

**Extra margin  
of blocking  
voltage  
up to  
 $T_J = 150\text{ }^\circ\text{C}$**

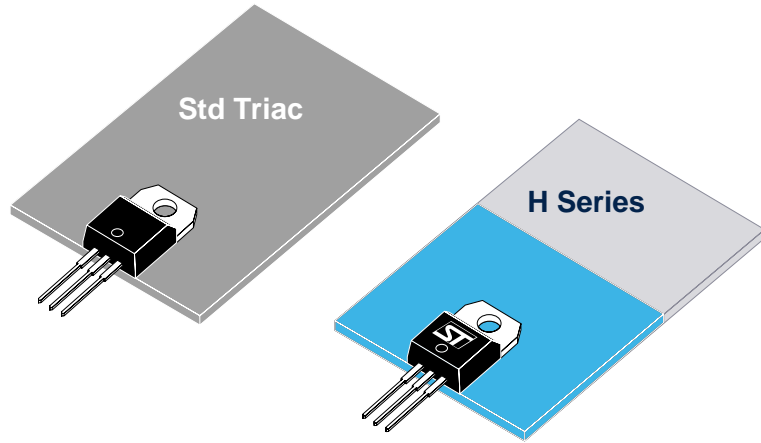
**Work directly on the grid  
up to 400V AC**







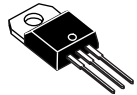
# 6H & 8H Triac portfolio



**-50%**  
HEATSINK SIZE



D<sup>2</sup>PAK



TO-220AB



TO-220AB Ins.

Part Number	Package			I <sub>T(RMS)</sub> A	T <sub>J</sub> °C	V <sub>DRM</sub> , V <sub>RRM</sub> V	I <sub>GT</sub> mA	I <sub>TSM</sub> A	dV/dt V/μs @150°C	(di/dt) <sub>c</sub> A/ms @10V/μs, @150°C
	TO-220AB	TO-220AB Insulated	D <sup>2</sup> PAK							
<b>600V, 10mA Gate, Logic-Level Triacs</b>										
T610H-6	T			6	150	600	10	60	75	2.3
T810H-6	T		G	8						
T1010H-6	T		G	10						
T1610H-6	T			16						
<b>600V, 35mA Gate, Snubberless Triacs</b>										
T835H-6	T	I	G	8	150	600	35	80	1000	11
T1035H-6	T	I	G	10						
T1235H-6	T	I	G	12						
T1635H-6	T	I	G	16						
T2035H-6	T	I	G	20						
T3035H-6	T	I	G	30						
<b>600V, 50mA Gate, Snubberless Triacs</b>										
T850H-6	T	I	G	8	150	600	50	80	1500	14
T1050H-6	T	I	G	10						
T1250H-6	T	I	G	12						
T1650H-6	T	I	G	16						
T2050H-6	T		G	20						
T3050H-6	T	I	G	30						
<b>800V, 35mA Gate, Snubberless Triacs</b>										
T835H-8	T	I	G	8	150	800	35	80	1500	8
T1235H-8	T	I	G	12						
T1635H-8	T	I	G	16						
T2035H-8	T	I	G	20						
T3035H-8	T	I	G	30						

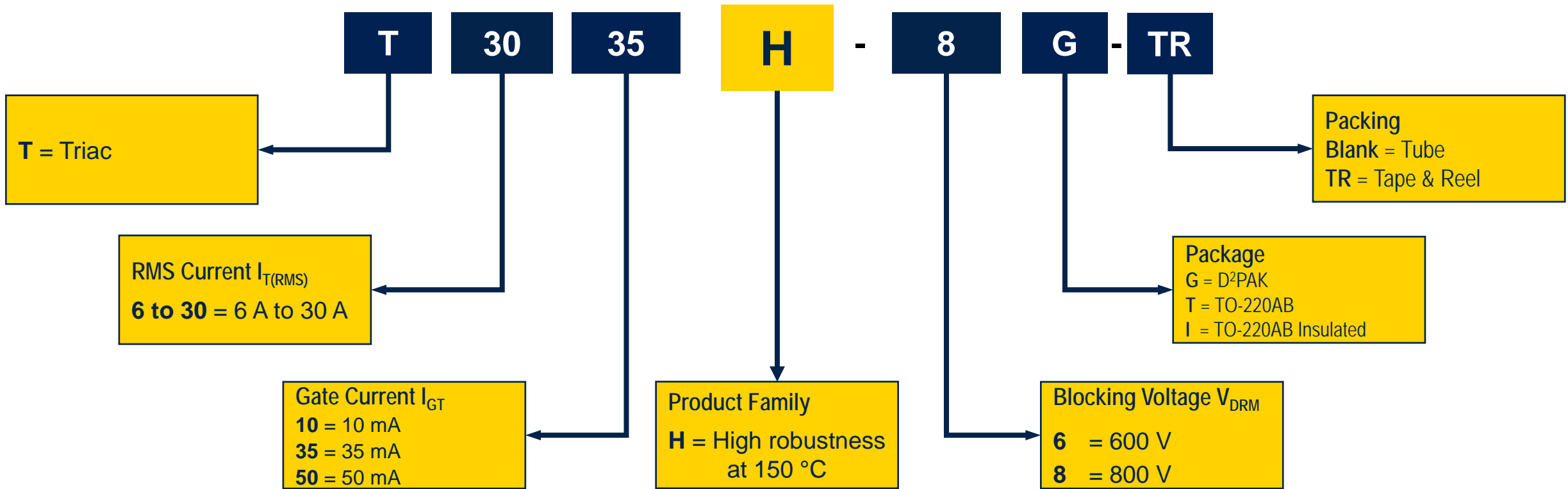


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NEW



# 6H & 8H Triac part numbering





# Design support & Tools



Portfolio & Datasheets

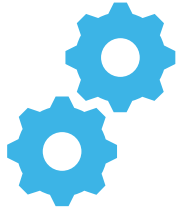
[Link to ST.com](#)

Phone Apps

E-Design suite

Intelligent design tools

[Link to ST.com](#)



Portfolio

[Link to ST.com](#)

Selector Guide

6H & 8H Triacs

Application Notes

Product know-how and design tips

[Link to ST.com](#)



Reference design

[Link to ST.com](#)

Evaluation boards

Online Support

Find answers

[Link to ST.com](#)



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# Our technology starts with You



Find out more at [www.st.com/en/thyristor-scr-ac-switches.html](http://www.st.com/en/thyristor-scr-ac-switches.html)

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