

# POWER SMC FLAT PACKAGE



## Schottky and Ultrafast rectifiers



### New compact surface-mount package ensures higher thermal conduction while reducing PCB space and cost

Housing Rectifiers up to 10 A, our compact PSMC packages offer a small outline to ensure optimal rectifying processes on compact PCB footprints.

Designed to provide an efficient heat sinking process, the PSMC range of Schottky and Ultrafast diodes and rectifiers targets applications with critical efficiency budgets and slim line converters.

Typical applications include all small size DC/DC in telecom, servers, handheld devices and automotive vehicles.

#### KEY FEATURES

- Low profile design: typical height of 1.1 mm
- Exposed pad
- Improved cost structure
- Wettable flanks

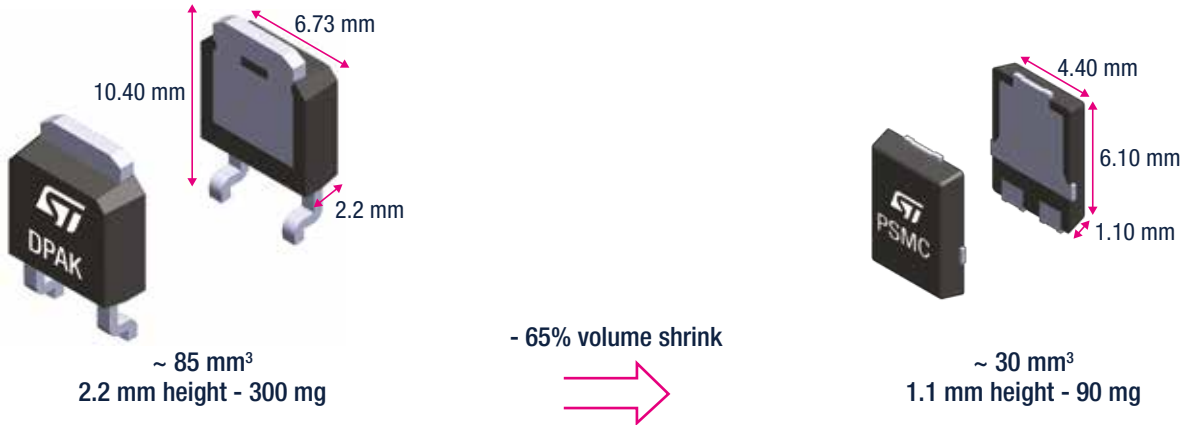
#### KEY BENEFITS

- Compact application design
- Higher system robustness
- Improved thermal conductivity
- Automatic visual inspection allowed during industrialization
- Adequate for high volumes/low costs applications

#### KEY APPLICATIONS

- Notebook adaptors
- Vacuum cleaner robots
- Battery chargers with small form factor
- Supplies for telecom and server infrastructure
- Automotive electronic control units, lighting systems, and injection control units

## Reduced space and printed circuit footprint



## Extended range of products

Power Schottky	$V_{RRM}$ and $I_0$	$V_F$ Typ. (V) ( $I_F = I_0 @ 125^\circ\text{C}$ )	$I_R$ Typ. (mA) ( $V_R = V_{RRM} @ 125^\circ\text{C}$ )	$T_j$ max ( $^\circ\text{C}$ )
STPS1230SF	30 V, 12 A	0.40	40	150
STPS1045SF	45 V, 10 A	0.51	7	175
STPS5L60SF	60 V, 5 A	0.40	50	150
STPS10M60SF	60 V, 10 A	0.53	8	175
STPS10H60SF	60 V, 10 A	0.60	2	175
STPS5H100SF	100 V, 5 A	0.54	2	175
STPS6M100SF	100 V, 6 A	0.57	5	175
STPS10M120SF	120 V, 10 A	0.60	3	175
<b>Ultrafast</b>				
STTH802SF	200 V, 8 A	0.79	0.006	175

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STPS1045SFY*	45 V, 10 A	0.51	7	175
STPS5L60SFY*	60 V, 5 A	0.40	50	150
STPS10M60SFY*	60 V, 10 A	0.53	8	175
STPS10H60SFY*	60 V, 10 A	0.60	2	175
STPS5H100SFY*	100 V, 5 A	0.54	2	175
<b>Ultrafast</b>				
STTH802SFY*	200 V, 8 A	0.79	0.006	175

Power Schottky	$V_{RRM}$ and $I_0$	$V_F$ Typ. (V) ( $I_F = I_0 @ 125^\circ\text{C}$ )	$I_R$ Typ. (mA) ( $V_R = V_{RRM} @ 125^\circ\text{C}$ )	$T_j$ max ( $^\circ\text{C}$ )
STPS630CSFY*	30 V, dual 3 A	0.32	20	150
STPS640CSFY*	40 V, dual 3 A	0.37	20	150
STPS660CSFY*	60 V, dual 3 A	0.50	3	175
<b>Ultrafast</b>				
STTH1002CSFY*	200 V, dual 5 A	0.79	4	175
STTH602CSF	200 V, dual 3 A	0.80	3	175
STTH602CSFY*	200 V, dual 3 A	0.80	3	175

Notes: \* automotive grade



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