

# SMA Flat and SMB Flat Diodes

Powerful rectifiers packed in 1mm-thick packages



Diodes in SMA Flat and SMB Flat packages help electrical engineers design circuits with higher thermal performance in a compact format.

The increasing demand for compact power management solutions has brought about the need for excellent thermal design. Thanks to newly engineered power density and thermal conduction technologies, SMA Flat and SMB Flat packages for diodes and rectifiers combine compactness and high power density, making them ideal for space-constrained applications.

## KEY FEATURES & BENEFITS

### SMA Flat

- 1, 2 and 3 A devices
- Avalanche specified for improved ruggedness
- Compatible with wave soldering
- ECOPACK®2
- 3 A device fits in 1-mm thick SMA Flat outline
- Compatible with SMA and SMB footprints
- Junction temperature (T<sub>j</sub>) ranging from 40°C to +175°C

### SMB Flat

- 3, 4 and 5 A devices
- Avalanche specified for improved ruggedness
- Compatible with wave soldering

- ECOPACK®2

- 5 A device fits in 1-mm thick SMB Flat outline
- Junction temperature (T<sub>j</sub>) ranging from 40°C to +175°C

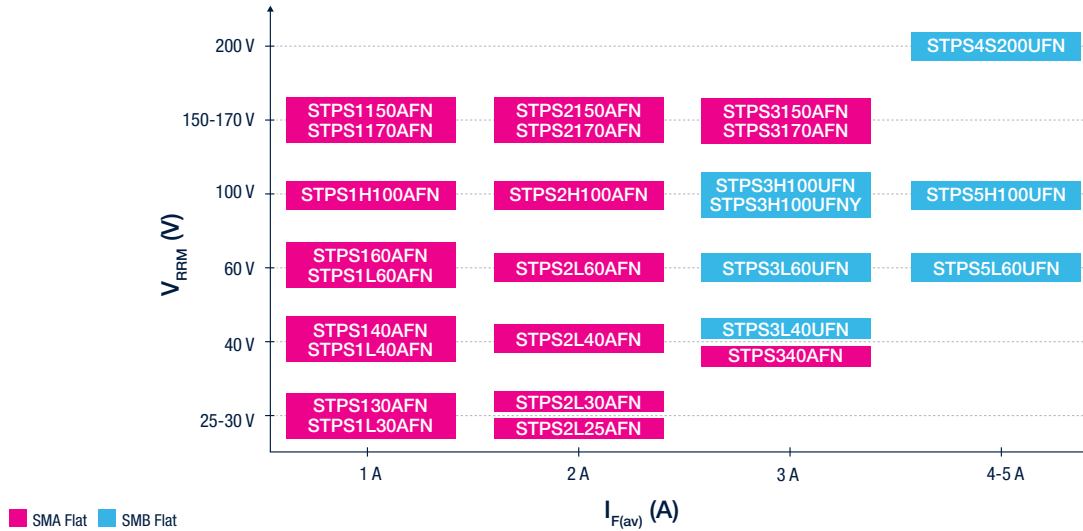
## KEY APPLICATIONS

- Automotive Electronic Control Units, lighting circuits, injection units
- Industrial equipment
- Telecom power and servers
- Notebook adapters and battery chargers with ultra-compact form factors

# SMA Flat and SMB Flat Diodes

Housed in 1mm-thick SMA Flat and SMB Flat packages, ST's 30 to 200 V power Schottky rectifiers are compatible with reflow and wave-soldering (notch).

## Power Schottky diodes ranging from 25 up to 200 V and from 1 to 5 A



## SMA Flat and SMB Flat Diodes

Part numbers	V <sub>RRM</sub> (V)	I <sub>F(av)</sub> (A)	V <sub>F</sub> (V) max 25°C	V <sub>F</sub> (V) max 125°C	I <sub>R</sub> (μA) max T <sub>J</sub> 25°C	I <sub>R</sub> (mA) max T <sub>J</sub> 125°C	I <sub>FSM</sub> (A) 10 ms, 25°C	Package
STPS3L40UFN	40	3	0.5	0.44	100	40	75	SMBFlat
STPS3L60UFN	60	3	0.62	0.59	150	30	100	SMBFlat
STPS5L60UFN	60	5	0.52	0.48	0.22	100	205	SMBFlat
STPS3H100UFN	100	3	0.76	0.61	1.5	1.7	135	SMBFlat
STPS5H100UFN	100	5	0.745	0.61	8	5	190	SMBFlat
STPS4S200UFN	200	4	0.87	0.71	5	2.5	130	SMBFlat
STPS2L25AFN	25	2	0.45	0.375	90	30	90	SMAFlat
STPS130AFN	30	1	0.55	0.46	10	10	60	SMAFlat
STPS1L30AFN	30	1	0.395	0.3	200	-	90	SMAFlat
STPS2L30AFN	30	2	0.45	0.375	200	15	75	SMAFlat
STPS140AFN	40	1	0.55	-	12	-	60	SMAFlat
STPS340AFN	40	3	0.63	0.57	20	10	105	SMAFlat
STPS1L40AFN	40	1	0.5	0.42	35	10	60	SMAFlat
STPS2L40AFN	40	2	0.43	0.34	220	80	75	SMAFlat
STPS1L60AFN	60	1	0.57	0.54	50	21	60	SMAFlat
STPS2L60AFN	60	2	0.6	0.55	100	-	105	SMAFlat
STPS160AFN	60	1	0.67	0.57	4	4	100	SMAFlat
STPS1H100AFN	100	1	0.77	0.62	4	0.5	50	SMAFlat
STPS2H100AFN	100	2	0.79	0.65	1	1	75	SMAFlat
STPS2150AFN	150	2	0.82	0.67	1.5	1.5	70	SMAFlat
STPS3150AFN	150	3	0.82	0.67	2	2	75	SMAFlat
STPS2170AFN	170	2	0.82	0.67	2.8	2.8	70	SMAFlat
STPS340AFN	40	3	0.63	0.57	20	10	105	SMAFlat



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