

SOD123Flat

Automotive-grade rectifiers



SOD123Flat AEC-Q101-qualified power Schottky diodes

Housed in an SOD123Flat package – only 26 mg and 1 mm thick – ST's qualified 60 and 100 V power Schottky rectifiers are suited for miniature LED lighting, battery-powered equipment, power converters, motor drives, reverse battery protection in automotive applications and equipment installed in harsh industrial environments thanks to a T_j range from -40 to 175 °C.

Current-rated 1 and 2 A, with a V_{RRM} of 40, 60 and 100 V, these new power Schottky devices with low leakage current for the 'H' series will push the limit of thermal runaway risk and also improve the global performance with the low forward voltage series labeled 'L' series.

KEY FEATURES

- 1 A, 2 A, 40, 60 V and 100 V power Schottky diodes
- SOD123Flat smart package, only 1-mm thick
- Automotive-grade qualified
- AEC-Q101 qualified and PPAP capable
- T_j range from -40 to $+175$ °C
- ECOPACK®2 resin, RoHS-compliant packages

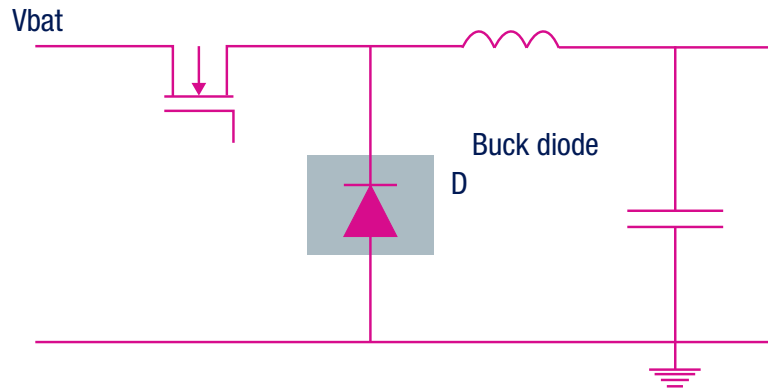
TARGETED APPLICATIONS

- LED lighting systems
- Small DC/DC converters (flyback, buck, and buck-boost topologies)
- Reverse battery protection circuits



BLOCK DIAGRAM

Small buck converter example



PACKAGE RANGE



STPS1L40ZFY / STPS1L60ZFY / STPS2H100ZFY / STPS2L40ZFY / STPS2L60ZFY
SOD123Flat non-exposed pad package

SOD123FLAT AUTOMOTIVE-GRADE POWER SCHOTTKY DIODE SELECTION GUIDE

	1 A	2 A
SOD123Flat		
40 V	STPS1L40ZFY	STPS2L40ZFY
60 V	STPS1L60ZFY	STPS2L60ZFY
100 V		STPS2H100ZFY



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