SOD128Flat
Automotive-grade rectifiers

Housed in an SOD128Flat 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 diodes in automotive applications and equipment installed in harsh industrial environments thanks to a Tj range from −40 to 175 °C. Almost 60% thinner than the standard 2.4 mm-high SMA package – while fully footprint compatible – designers can create lighter and slimmer modules, or easily use these as replacements in existing designs.

KEY FEATURES
- 3 A, 5 A, 60 V and 100 V power Schottky diodes
- SOD128Flat smart package, only 1-mm thick
- Footprint compatible with standard SMA package
- Automotive-grade qualified
- AEC-Q101 qualified and PPAP capable
- TJ 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 typologies)
- Reverse battery protection circuits
BLOCK DIAGRAM
Small buck converter example

Vbat

D
Buck diode

PACKAGE RANGE

STPS360AFY / STPS3H100AFY / STPS5H100FY
SOD128Flat non-exposed pad package

SOD128FLAT AUTOMOTIVE-GRADE POWER SCHOTTKY DIODE SELECTION GUIDE

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