SOD128Flat power Schottky diodes for improved cost and space savings

KEY FEATURES
- 3 A, 60 V and 100 V power Schottky diodes
- SOD128Flat smart package, only 1-mm thick
- Low \( I_R \) capability
- Footprint compatible with standard SMA package
- \( T_J \) range from \(-40 \) to \(+175 \) °C
- ECOPACK®2 resin, RoHS-compliant packages

TARGETED APPLICATIONS
- LED and general lighting systems
- Small DC/DC converters (flyback, buck, and buck-boost topologies)
- Point-of-load (POL) converters
- Ultra-thin adaptors
- Smart chargers

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 and equipment installed in harsh industrial environments thanks to a \( T_J \) 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. Current-rated 3 A, with a \( V_{\text{RRM}} \) of 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.
BLOCK DIAGRAM

Flyback converter example

PACKAGE RANGE

STPS360AF / STPS3H100AF
SOD128Flat non-exposed pad package

SOD128FLAT POWER SCHOTTKY SELECTION GUIDE

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Note * New