STB9NK60Z, STP9NK60Z, STP9NK60ZFP

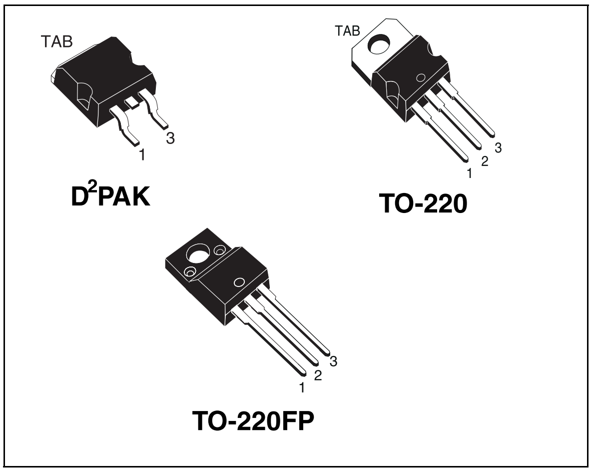
N-channel 600 V, 0.85 Ω typ., 7 A Zener-protected SuperMESH™ Power MOSFET in D²PAK, TO-220 and TO-220FP packages

Datasheet — production data

Features

Order codes	V_{DS}	$R_{DS(on)}$ max	I_D	P_{TOT}
STB9NK60ZT4	600 V	0.95 Ω	7 A	125 W
STP9NK60Z				
STP9NK60ZFP				30 W

- Extremely high dv/dt capability
- Improved ESD capability
- 100% avalanche tested
- Gate charge minimized
- Very low intrinsic capacitances



Applications

- Switching applications

Description

These devices are N-channel Zener-protected Power MOSFETs developed using STMicroelectronics' SuperMESH™ technology, achieved through optimization of ST's well established strip-based PowerMESH™ layout. In addition to a significant reduction in on-resistance, this device is designed to ensure a high level of dv/dt capability for the most demanding applications.

Figure 1. Internal schematic diagram

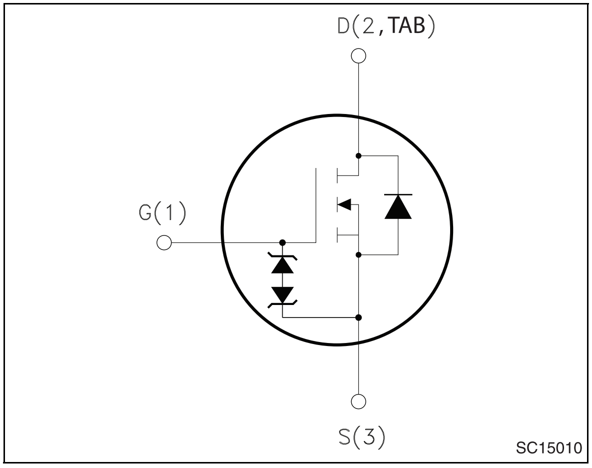


Table 1. Device summary

Order codes	Marking	Package	Packaging
STB9NK60ZT4	B9NK60Z	D²PAK	Tube
STP9NK60Z	P9NK60Z	TO-220	
STP9NK60ZFP	P9NK60ZFP	TO-220FP	