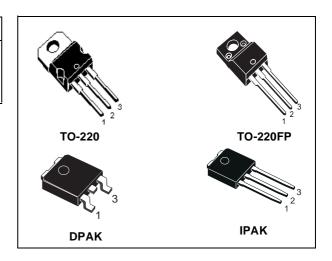


## STP5NK40Z - STP5NK40ZFP STD5NK40Z - STD5NK40Z-1

N-CHANNEL 400V - 1.47Ω - 3A TO-220/TO-220FP/DPAK/IPAK
Zener-Protected SuperMESH™Power MOSFET

TYPE	V <sub>DSS</sub>	R <sub>DS(on)</sub>	I <sub>D</sub>	Pw
STP5NK40Z	400 V	< 1.8 Ω	3 A	45 W
STP5NK40ZFP	400 V	< 1.8 Ω	3 A	20 W
STD5NK40Z	400 V	< 1.8 Ω	3 A	45 W
STD5NK40Z-1	400 V	< 1.8 Ω	3 A	45 W

- TYPICAL  $R_{DS}(on) = 1.47 \Omega$
- EXTREMELY HIGH dv/dt CAPABILITY
- 100% AVALANCHE TESTED
- GATE CHARGE MINIMIZED
- VERY LOW INTRINSIC CAPACITANCES
- VERY GOOD MANUFACTURING REPEATIBILITY

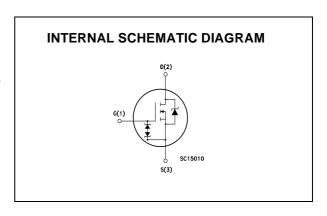


## **DESCRIPTION**

The SuperMESH™ series is obtained through an extreme optimization of ST's well established strip-based PowerMESH™ layout. In addition to pushing on-resistance significantly down, special care is taken to ensure a very good dv/dt capability for the most demanding applications. Such series complements ST full range of high voltage MOSFETs including revolutionary MDmesh™ products.

## **APPLICATIONS**

- HIGH CURRENT, HIGH SPEED SWITCHING
- IDEAL FOR OFF-LINE POWER SUPPLIES, ADAPTORS AND PFC
- LIGHTING



## **ORDERING INFORMATION**

SALES TYPE	MARKING	PACKAGE	PACKAGING
STP5NK40Z	P5NK40Z	TO-220	TUBE
STP5NK40ZFP	P5NK40ZFP	TO-220FP	TUBE
STD5NK40ZT4	D5NK40Z	DPAK	TAPE & REEL
STD5NK40Z-1	D5NK40Z	IPAK	TUBE

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