Contact sales@powerx-ic.com for Full Datasheet

POWER X
博尔芯半导体科技

PXPG05R002

1.9mΩ, 100V, Enhancement Mode Power Transistor

1 Features

- Ultra Low $R_{DS(ON)}$
  $R_{DS(ON)_TYP}$ = 1.9mΩ @V_{GS} = 5V
- Ultra Low Gate Charge
  Q_{g_TYP} =11nC @V_{GS} = 5V.
- Zero reverse recovery loss
- Available in FCQFN 3mm*5mm package
- RoHS, Pb-free, REACH-compliant

2 Applications

- High frequency DC-DC converter
- Laser Driver
- Motor driver

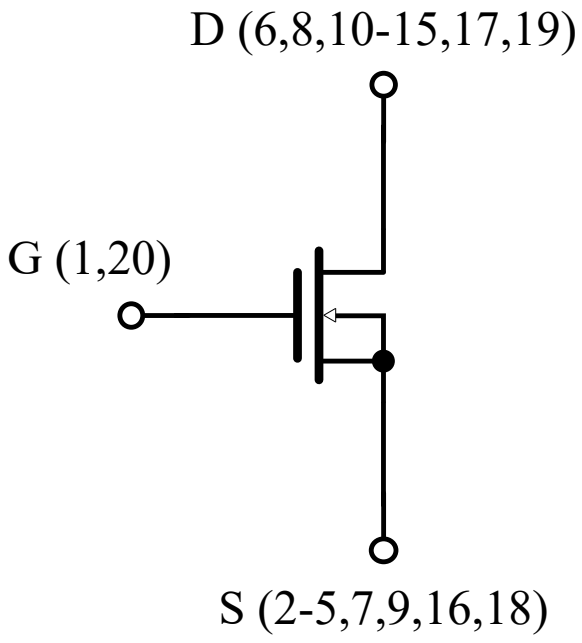
3 Description

This is a 100V GaN-on-Si enhancement-mode power transistor in FCQFN with 3mm*5mm package size. The properties of GaN allow for high current, high breakdown voltage and high switching frequency.

Parameters	Values	Units
$V_{DS,\ max}$	100	V
$R_{DS(on),typ}$@V_{GS}=5V	1.9	mΩ
$R_{DS(on),\ max}$@V_{GS}=5V	2.5	mΩ
$Q_{G,\ typ}$@V_{DS}=50V	11	nC
$I_{D,\ Pulse}$	540	A
Q_{OSS} @ 50 V	56	nC

Key Performance Parameters at Tj = 25 ℃

Typical (Simplified) Diagram



Simplified Stage Diagram