

FOD3120 & FOD3150

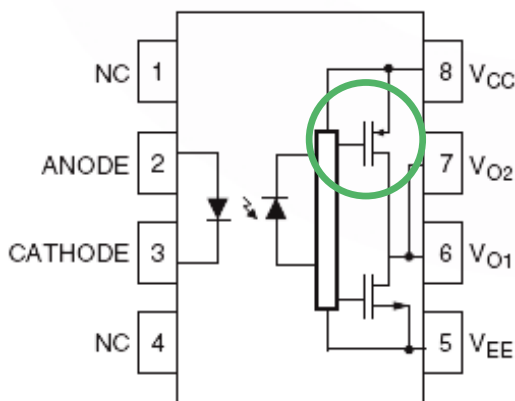
HIGH SPEED MOSFET/IGBT GATE DRIVE OPTOCOUPLERS

The FOD3120 and FOD3150 are 2.5A and 1.0A output current gate drive optocouplers capable of driving 1200V/20A IGBTs and MOSFETs in solar inverters, motor drives and induction heating applications. These optocouplers offer best-in-class common mode rejection (CMR) making the application more immune to noise. With tight pulse width distortion (100ns), leading to smaller filters and improved power efficiency, these devices also offer a 1414V peak working voltage to accommodate switching of 1200V IGBTs.

These MOSFET gate drive optocouplers complement ON Semiconductor's (former Fairchild) offering in the discrete power MOSFET and IGBT line of products, providing ON Semiconductor's customers with one stop shopping from the logic control portion of the circuit to the isolated gate driver to the power MOSFET. This combined solution converts the mW to kW providing electrical isolation between the primary and secondary circuits.

FEATURES & BENEFITS

- Wide operating voltage range of 15V to 30V
- High output current capability
 - FOD3120 – 2.5A
 - FOD3150 – 1.0A
- 5000V isolation voltage rating
 - 1414V(peak) working voltage (UIORM) ideal for 1200V IGBTs
- High common mode immunity
 - FOD3120 – 35,000 V/ μ s minimum
 - FOD3150 – 20,000 V/ μ s minimum
- Low supply currents (ICCH, ICCL)
 - FOD3120 – 3.8mA maximum
 - FOD3150 – 5mA maximum
 - >8mm creep age and clearance distance (option T)



APPLICATIONS

- Solar Inverters
- Motor Drives
- Power Inverters
- Uninterruptible Power Supplies
- Induction Heating
- Isolated MOSFET/IGBT drives

SAFETY AND REGULATORY

- UL1577, 5000 VRMS for 1 min.
- IEC60747-5-5

PACKAGE

- DIP8

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