



Category: MOSFET

CIRCUIT IDEAS FOR DESIGNERS

Schematic no. fet\_11100.0

## **Basic MOSFET / EPAD® MOSFET Inverter Circuit**

## Description

This circuit shows a basic MOSFET (or EPAD MOSFET) inverter circuit. The drain terminal is the output and the gate terminal is the input. The output voltage Vo is determined by the input voltage and the output loading R. Vo can be a voltage either above or below threshold voltage, which depends on the drain current Ids as controlled by the gate voltage, and which in turn depends on R value. The drain current is given by Ids = (V + - VDS)/R.

At very high R values, the drain current may decrease to such a low level that leakage current becomes a significant factor. The drain leakage current is a function of ambient temperature, and it ranges from nA to a few pA, depending on the ambient temperature range of operation considered and the device selected.

For full schematic diagram and notes, please register and login at aldinc.com

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