

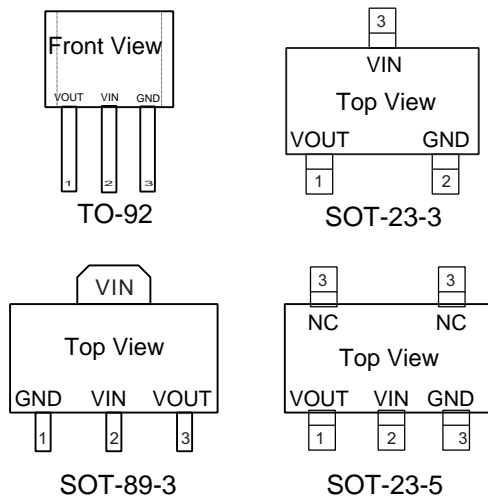
Low Power Voltage Detector

General Description

The KF70XXM series devices are a set of three terminal low power voltage detectors implemented in CMOS technology. Each voltage detector in the series detects a particular fixed voltage ranging from 0.9V to 5.0V. The voltage detectors consist of a high-precision and low power consumption standard voltage source as well as a comparator, hysteresis circuit, and an output driver (CMOS inverter or NMOS open drain). CMOS technology ensures low power consumption.

Although designed primarily as fixed voltage detectors, these devices can be used with external components to detect user specified threshold voltages.

Pin Assignment



Selection Table

| Part No. | Hysteresis Voltage | Hysteresis Width | Output | Tolerance | Package |
|------------|--------------------|------------------|--------|------------|---|
| KF7009MCxx | 0.9V | 4% | CMOS | ±1% or ±2% | TO-92 SOT-89-3 SOT-23-3 SOT-23-5 |
| KF7009MNxx | 0.9V | 4% | NMOS | ±1% or ±2% | |
| KF7010MCxx | 1.0V | 4% | CMOS | ±1% or ±2% | |
| KF7010MNxx | 1.0V | 4% | NMOS | ±1% or ±2% | |
| KF7011MCxx | 1.1V | 4% | CMOS | ±1% or ±2% | |
| KF7011MNxx | 1.1V | 4% | NMOS | ±1% or ±2% | |
| KF7012MCxx | 1.2V | 4% | CMOS | ±1% or ±2% | |
| KF7012MNxx | 1.2V | 4% | NMOS | ±1% or ±2% | |
| ... | ... | 4% | ... | ±1% or ±2% | |
| KF7050MCxx | 5.0V | 4% | CMOS | ±1% or ±2% | |
| KF7050MNxx | 5.0V | 4% | NMOS | ±1% or ±2% | |

Features

- Low power consumption
- Low temperature coefficient
- Built-in hysteresis characteristic
- High input voltage (up to 10V)
- Output voltage accuracy: tolerance ±1% or ±2%
- TO-92, SOT-89-3, SOT-23-3 and SOT-23-5 package

Applications

- Battery checkers
- Level selectors
- Power failure detectors
- Microcomputer reset
- Battery memory backup
- Non-volatile RAM signal storage protectors

Typical applications

