

Capacitive switch with auto-calibration, large voltage operating range and very low power consumption

General description

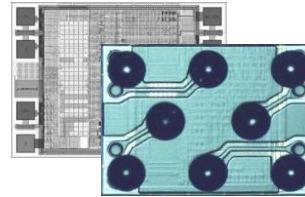
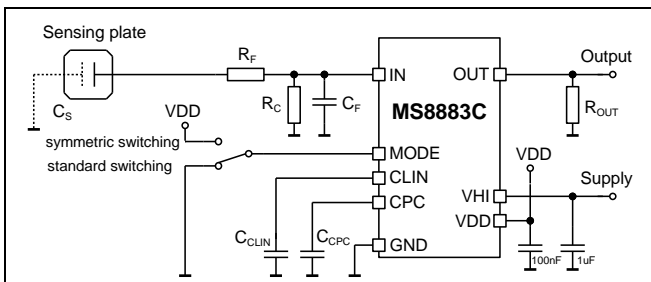
The integrated circuit MS8883C is a capacitive switch that uses a digital algorithm to detect a change in capacitance on a remote sensing plate.

Changes in the static capacitance (as opposed to dynamic capacitance changes) are automatically compensated using continuous auto-calibration. Remote sensing plates (e.g. conductive foil) can be connected to the IC using coaxial cable.

Applications

- Medical
- Automotive
- Buildings & Sanitary
- Mobile application
- Wearables
- Hermetical or vandal proof switches
- Intrinsic safety

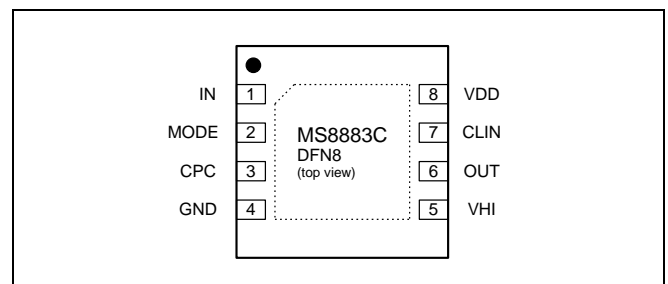
Typical application



Features

- Dynamic proximity switch
- Digital processing method
- Continuous auto-calibration
- Sensing plates can be connected remotely
- Open-drain output (P-type MOSFET)
- Very low operating current: typ. 3µA
- Adjustable response time
- Adjustable sensitivity
- Configurable switching dynamics
- Large voltage operating range: 2.7V to 9V
- Temperature operating range: -40 to 85°C
- Available in 3x3mm DFN8

Pinout



Ordering information

Type	Package	Shipping	Article No.
MS8883C	DFN8 3x3mm	Tape&Reel	9160178

Note: Other packages available for larger quantities

MS8883C

- Very low operating current! The MS8883C is ideal for use in battery-powered applications in the Wearables and mobile market.
- Reliable operation! The implemented digital processing method prevents from false triggering.
- Easy to manufacture! The auto-calibration feature automatically compensates mechanical tolerances of the fabrication process, variations in material properties and tolerances in electrical properties of external components.
- Touch or proximity! The MS8883C is a touch or a proximity switch. The operating mode is configured only by external components and the sensing plate.

Request the datasheet at info@microdul.com or call +41 44 455 35 11 for more information.