

Inductive Proximity Sensor IC

Body 4mm x 4mm

Features

- Wide supply voltage range (5.5 V to 38 V)
- Fully integrated low cost proximity sensor IC
- User-adjustable sensing range and hysteresis
- Built-in voltage regulator
- NPN open collector output with guaranteed sink current of 150mA
- Output overload/over-current protection
- Broad range of operating frequency (100 kHz to 1MHz)

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AIC1601

Inductive Proximity Sensor IC

Product Overview

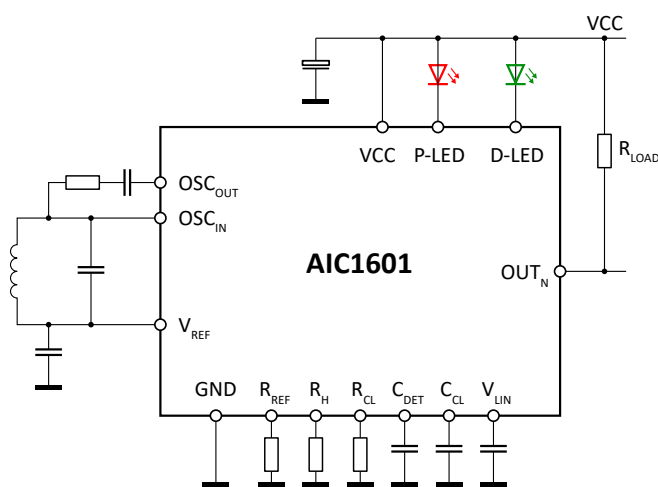
The AIC1601 is a sensor IC for inductive proximity applications and can be used with a range of inductive transducers. This device has an analog front end, the detection logic, output stage and the status LED drivers (detection and power) integrated.

Product Specifications - Key Parameters

Specification Parameter	Symbol	Max	Unit
Supply Voltage	V_{CC}	40	V
Voltages at pins OSC_{IN} , R_H , OSC_{OUT} , C_{DET} , R_{REF} , V_{REF} , V_{LIN} , and C_{OVL}	V_{MAX}	$V_{LIN} + 0.3$	V
Voltage at pin NO/NC	$V_{NO/NC}$	V_{CC}	V
ESD test voltage	V_{ESD}	1	kV
Storage temperature range	T_{STG}	150	°C
Junction temperature	T_J	150	°C

Typical Applications

The AIC1601 is designed for Inductive proximity detection applications and can be used within a range of inductive transducers.



AIC1601 Typical Application Circuit