



HONEYWELL

SD5630-002

See full Datasheet below...

onlinecomponents.com

THE ONLINE DISTRIBUTOR OF ELECTRONIC COMPONENTS

BUY NOW



MASTERTM
ELECTRONICS

BUY NOW

masterelectronics.com & onlinecomponents.com
are **authorized** e-commerce distributors
of electronic components.



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

SD5630-002

SD Series Optoschmitt Detector, TO-46 Metal Can Package

Features

- TO-46 metal can package
- 6 ° (nominal) acceptance angle
- TTL/LSTTL/CMOS compatible
- High noise immunity output
- Buffer (SD5620) or inverting (SD5630) logic available
- Two sensitivity ranges
- Mechanically and spectrally matched to SE3450/5450, SE3455/5455 and SE3470/5470 infrared emitting diodes

Description

The SD5620/5630 series is a family of single chip Optoschmitt IC detectors mounted in a TO-46 metal can package. The photodetector consists of a photodiode, amplifier, voltage regulator, Schmitt trigger and an NPN output transistor with 10 kOhm (nominal) pull-up resistor. Output rise and fall times are independent of the rate of change of incident light. Detector sensitivity has been internally temperature compensated. The TO-46 package is ideally suited for operating in hostile environments.

Device Polarity:

Buffer - Output is HI when incident light intensity is above the turn-on threshold level.

Output is LO when incident light intensity is above the turn-on threshold level.



SD5630-002

SD Series Optoschmitt Detector, TO-46 Metal Can Package

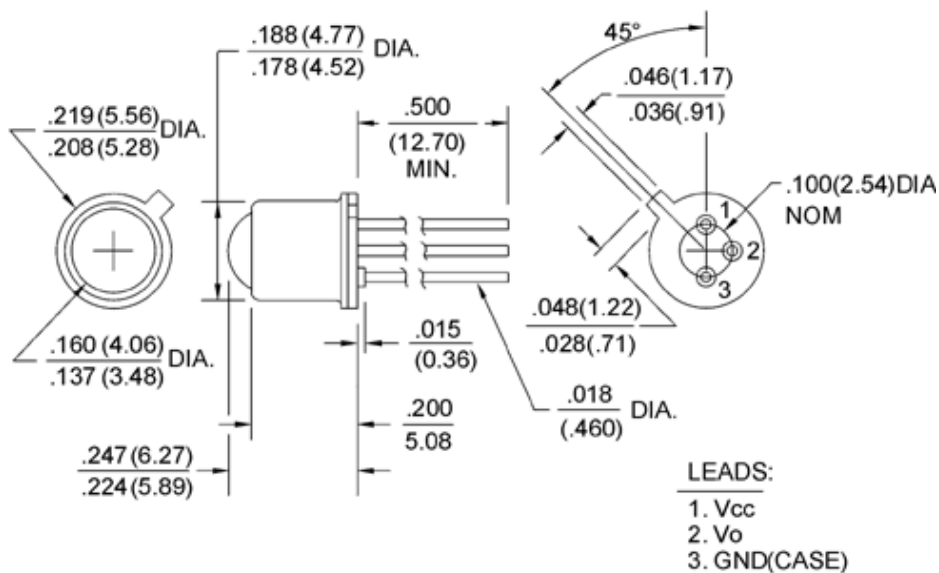
| Product Specifications | |
|---|---|
| Product Type | IR Component |
| Angular Response (Degree) | 12 |
| Turn-on Threshold Irradiance | 0.13 mW/cm ² maximum |
| Output | 10 kOhm Pull-up |
| Output Logic | Inverter |
| Package Style | TO-46, Dome Lensed |
| Package Components | Metal |
| Operating Temperature Range | -40 °C to 100 °C [-40 °F to 212 °F] |
| Dark Current | 250 nA |
| Hysteresis (H) | 5% to 30% |
| Operating Supply Voltage | 4.5 V to 16.0 V |
| Supply Voltage | 16.0 Vdc |
| High Level Output Voltage | 2.4 V minimum |
| Low Level Output Voltage | 0.4 V maximum |
| Operating Point Temperature Coefficient | -0.76 %/°C |
| Internal Pull-up Resistor | 5.0 kOhm min., 10.0 kOhm typ., 20.0 kOhm max. |

| | |
|---|--|
| Output Rise Time | 60 ns |
| Output Fall Time | 15 ns |
| Clock Frequency | 100 kHz |
| Duration of Output Short Vcc or Ground | 1.0 second |
| Comment | Output is LO when incident light intensity is above the turn-on threshold level. |
| Availability | Global |
| Product Name | Optoschmitt Detector |
| Supply Current max. | 12.0 - 15.0 mA @ 25 °C |
| Output Current max. | 18 mA |



SD5630-002

SD Series Optoschmitt Detector, TO-46 Metal Can Package



SD5630-002

SD Series Optoschmitt Detector, TO-46 Metal Can Package

⚠ WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

 WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

© Copyright Honeywell Inc. 1998-2004 All rights reserved.