

Background Suppression Photoelectric Sensor

FIT0770

Product Overview

01/13/2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

The Background Suppression Photoelectric Sensor from DFRobot offers a 15mm to 350mm adjustable detection range that can be adjusted by the knob. This sensor is fast and stable and features a 0.5ms response time. The background suppression sensor features eco-friendly and durable ABS material. This sensor detection performance is not affected by color and background and is less affected by surface roughness.



The background suppression sensor features reverse current protection, over-current protection, and over-voltage protection. This sensor can withstand -20°C to 65°C operating temperature range and a 35% to 85% relative humidity range. The background sensor is safe and reliable to use in various fields, such as security protection, LED lighting, toys, detection, and industrial automation control.

Specifications

- 15mm to 350mm distance range
- 10mm spot size
- 12VDC to 24VDC $\pm 10\%$ power supply range
- -20 to 65°C ambient temperature range with no freezing
- 35% to 85% relative humidity range with no condensation
- 20g weight
- 0.5ms response time
- 20mA maximum current consumption

Features

- Spot type:
 - Red light
- Interval distance:
 - Minimum 1mm and no more than 5% of the set distance
- Black-white differential:
 - No more than 5% (white: reflective 95% and black: reflective 5%)
- Detectable objects:
 - Opaque and translucent materials
- Sensitivity adjustment:
 - Knob adjustment
- Operation mode:
 - Light-on/Dark-on (Button automatic adjustment and long press for 10s to automatically switch)
- Indicator:
 - Output and power:
 - Red LED
 - Stable operation:
 - Green LED
- Control output:
 - NPN or PNP:
 - 100mA (40V) maximum
- Residual voltage:
 - 1V maximum
- Protection circuit:
 - Reverse current protection, over current protection, and over-voltage protection
- IP-66 protection level
- Environmental luminosity:
 - Incandescent lamp:
 - 5000lux maximum
- Daylight:
 - 20000lux maximum
- Outer cover:
 - ABS material

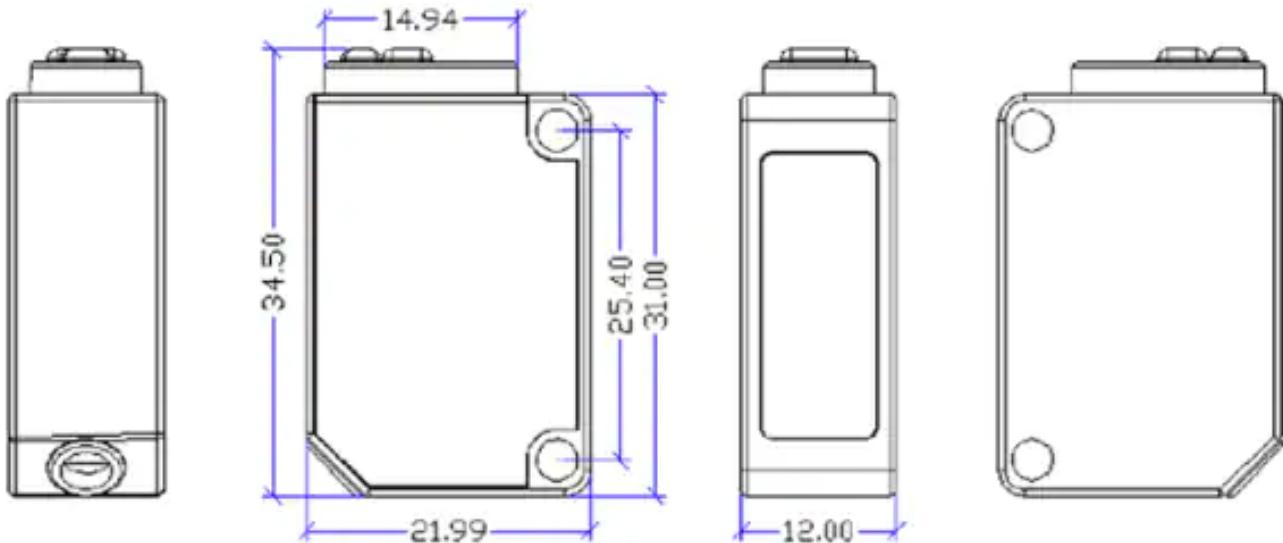
Kit Contents

- 1x Background suppression sensor

Applications

- Security protection
- LED lighting
- Toys
- Detection
- Industrial automation control

Mechanical Drawing



Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-background-suppression-photoelectric-sensor/>