AFBR-S6PY3151

Contact Sales

Thin film analog pyroelectric dual-channel high sensitivity sensor with a 3.91 μm / 90 nm filter and a 3.30 μm / 160 nm filter for CH4 detection

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Overview

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Overview

Broadcom's thin film pyroelectric infrared (IR) sensors for gas detection and other substance concentration measurements offer exceptionally high responsivity, low microphonics and class-leading thermal and electrical stability.

The analog dual detector AFBR-S6PY3151 has a reference channel with a 3.70 μ m / 110 nm filter and one channel with a 4.26 μ m / 180 nm filter. The main use of this high sensitivity device is CO2 detection.

This high-performance current mode sensor achieves a signal-to-noise of ~10,000 and offers a fast, stable response over a wide operating frequency range. The sensor elements are built into a low noise circuit that has an internal CMOS op amp, with a 10 G Ω feedback resistor outputting a voltage signal centered on half the supply rail.

[PDF] ezPyro SMD+ I²C Pyroelectric Extended Infrared Sensor for Gas Sensing Data Sheet

Features

- High sensitivity
- Fastest response leading to higher resolution and lower power consumption
- High responsivity and SNR
- Robust low microphonics
- Thermally stable to slow drift and thermal shock
- Instant switch-on
- Long operational life a stable pyroelectric material
- Operational from 1-40 Hz. Class-leading SNR above 10-15 Hz
- Wide filter choice
- Extended temperature range
- Less external gain required
- Reliable and easy to use
- Outstanding support of hardware, software and algorithm development

Applications

- NDIR gas detection
- Flame detection
- NDIR pellistor and electrochemical replacements
- Automotive gas analysis
- · Medical gas analysis
- Anaesthesia
- Fluid analysis
- Food safety
- THz detection
- Energy measurement
- Miniaturized designs





Lifecycle Status

Active

Substance Compliance



RoHS6

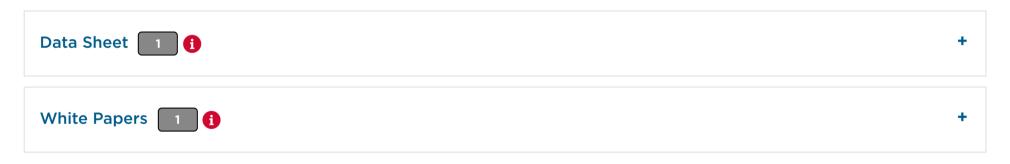
Y with exemptions

Specifications

Specification	Value
Lifecycle	Active
Distributor Inventory	Yes
Application	Gas Sensing
Filter	370 μm / 110 nm + 4.26 μm / 180 nm
RoHS6 Compliant	Y with exemptions

Documentation

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Previously Viewed



AFBR-S6PY2626

Thin film analog pyroelectric dual-channel high sensitivity sensor with a 3.91 μm / 90 nm filter and a 3.30 μm / 160 nm filter for CH4 detection



ACPL-W346-000E

2.5 Amp Output Current Power, GaN & SiCMOSFET Gate Drive Optocoupler with Rail-to-RailOutput Voltage in Stretched SO6