Industrial-grade XYZ color sensing solution www.ams.com/Color-Sensors

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AS73210 – JENCOLOR[®] Analog XYZ Color Sensor with large detector area

- No aging of the filter, UV resistant
- High temperature stability up to 100°C
- High speed measurement in combination AS89000 or AS89020
- Minimal cross talk, smooth filter curves due to filter on glass technology
- High sensitiveness through large area diode

Sensing **is life.**



General Description

The AS73210 is a True Color Sensor with a filter function based on the color standard CIE 1931/DIN 5033 (human eye perception) in a compact QFN16 package. The AS73210 is long-term stable over the entire product lifetime and resistant to external influences such as temperature or aging drifts, due to the special JENCOLOR® interference filter technology. The JENCOLOR® sensors are made of 19x3 photodiodes integrated on-chip

(special pin silicon technology with advanced sensitivity). The diodes are aligned as segments of a multiple-element hexagonal matrix structure with the diameter of 2 mm. The design as Si-PIN photodiodes allows signal frequencies up to the upper kHz-range. In order to achieve minimal cross talk between the photodiodes the individual sectors are separated from each other by additional structures.

Benefits

- High transmission and blocking interference filters
- No aging of the filter, UV resistant
- High temperature stability up to 100°C
- High signal frequency up to 340 kHz in combination with AS89020
- Minimal cross talk, smooth filter curves due to patented
- filter on glass technology
- High sensitiveness through large area diode (diameter of the optical sensitive surface approx. 2mm)

Applications

- Inline + offline color matching for industrial applications
- Active feedback control for LED lighting
- Inline manufacturing and process control
- Auto-calibration of displays & monitors
- Ambient light and color metering

Features

- JENCOLOR® interference filter characteristic based on CIE 1931/ DIN5033
- Analog output
- Compatible with analog and digital converters
- AS89000 high speed analog output
- AS89010 high resolution digital output AS89020 high speed digital output
- QFN16-package in size 4x4 mm

Spectral Responsibility



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