OPTICAL SENSOR · DATASHEET

Flashlight Sensor

EM044505-0

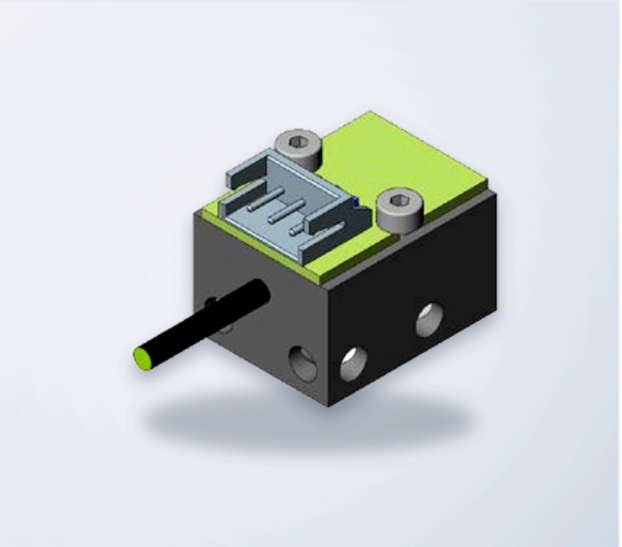
BLUELEC
Part of JOT Automation

The **EM044505-0** is a high-sensitivity, low-noise optical sensor for detecting a device's flashlight or display output in production test. It responds fast to visible light across the 400–700 nm range.

The sensor is fitted in a holder with a 300 mm optical cable terminated with a flying end, allowing flexible placement close to the light source in the fixture.

A built-in output timer holds the detection signal for >100 ms, ensuring reliable capture of short light pulses by the test system.

Designed for automated and semi-automated production test fixtures.



OPTICAL & ELECTRICAL

Spectral range	**400 – 700 nm**
Peak wavelength λp	**645 nm**
Irradiance responsivity	**1.68 V/(µW/cm²) (typ.)**
Output hold timer	**>100 ms**
Supply voltage	**+5 V**

MECHANICAL

Holder body	**20 × 16 mm (0.79 × 0.63 in)**
Optical cable	**300 mm (11.81 in), flying end**
Mounting holes	**2 × Ø3.3 mm (Ø0.13 in)**
Connector	**JST S3B-EH**

ENVIRONMENTAL

Operating temperature	**0 – 50 °C**
Storage temperature	**−20 … +70 °C**
Relative humidity	**15 – 90 % non-condensing**
Compliance	**RoHS**

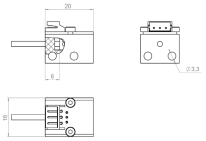
PINOUT

JST S3B-EH

Pin	Signal
1	GND
2	+5 V
3	OUT

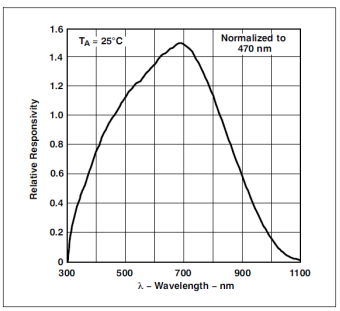
DIMENSIONS

mm



TYPICAL SPECTRAL RESPONSIVITY

normalised · T_a = 25 °C



3D CAD models available on request via **sales@bluelec.com**

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Specifications subject to change without notice.