Data Sheet

EFFECTlight

OS-WL01A

Benefits

- LED-Module with condensed beam pattern
- Extremly small viewing angle
- Available in various colors

Applications

- Grazing angle accent lighting in architectural settings
- Signals without security requirements
- Specialized spotlighting

Technical Operating Data

Product	Color	Number of LEDs	Voltage [V DC]*	Power [W]*	Current [A]*	Radiance Angle [°]*	Wavelength [nm] Color Temp [K]*	Lum. Intensity [cd]*
OS-WL01A-A1	red	10	24	1,1	0,047	4	617 nm	3500
OS-WL01A-Y1	yellow	10	24	1,1	0,047	4	587 nm	2500
OS-WL01A-V1	verde	10	24	1,3	0,054	4	503 nm	2000
OS-WL01A-B1	blue	10	24	1,3	0,054	4	469 nm	350

*) All Data are related to the entire module
Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Technical Features

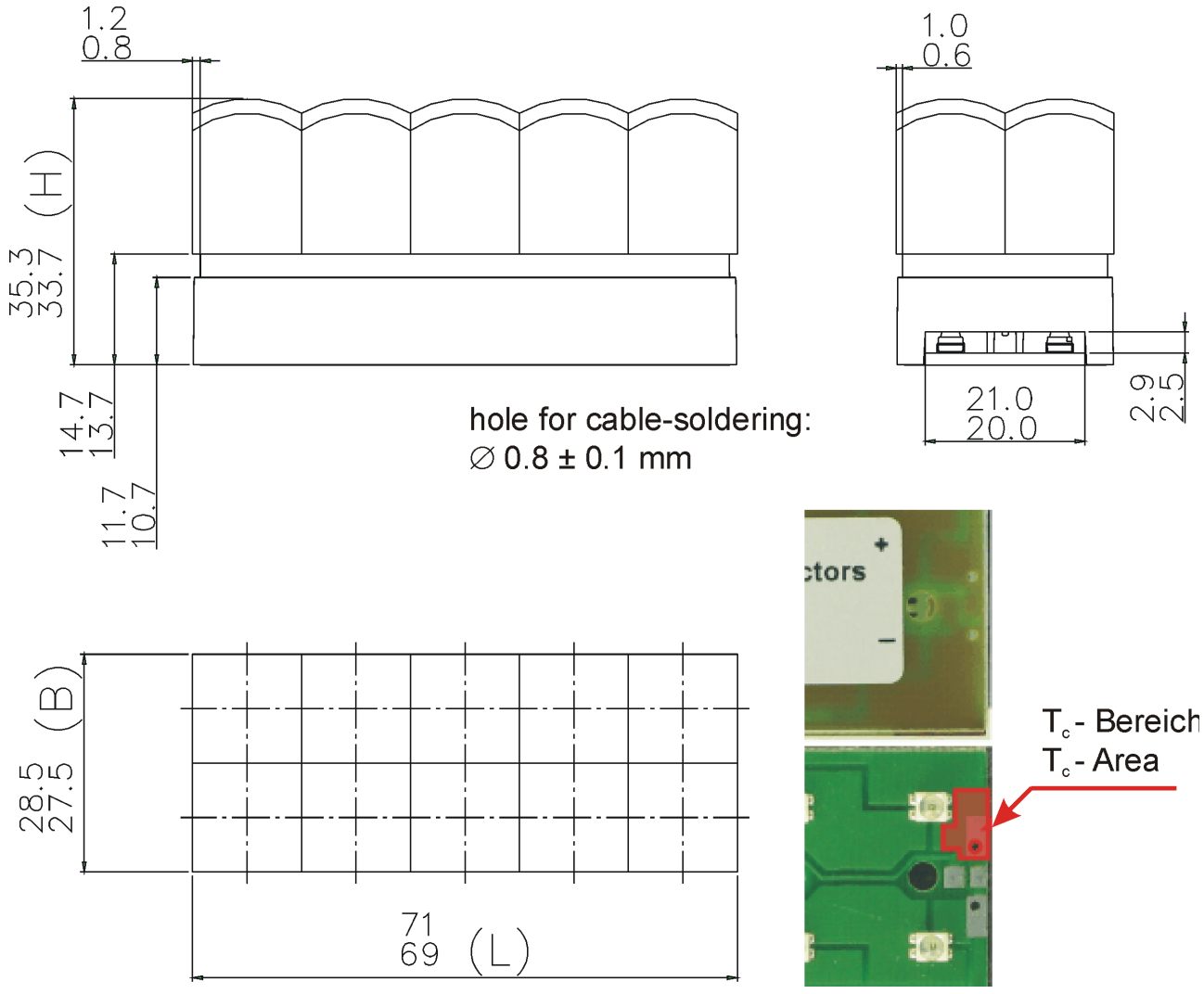
- Modules optimized for use with OSRAM OPTOTRONIC power supplies.
- Dimmable by Pulse width modulation (PWM) with the electronic controller OT DIM
- Parallel connection up to fourteen modules
- Connecting possible by OSRAM Connect System
- Easily combined with supplementary optics

Minimum and Maximum Ratings

Product	Operating Temperatur at Tc-Point [°C] *	Storage Temperature [°C] *	Voltage Range [V dc] *	Reverse Voltage [V dc] *
OS-WL01A-A1	-30 ... 65	-40 ... 85	23 ... 25	25
OS-WL01A-Y1	-30 ... 65	-40 ... 85	23 ... 25	25
OS-WL01A-V1	-30 ... 65	-40 ... 85	23 ... 25	25
OS-WL01A-B1	-30 ... 65	-40 ... 85	23 ... 25	25

*) Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED Module.
Exceeding maximum ratings for operation voltage will cause hazardous overload and will likely destroy the LED Module.
The temperature of the LED module has to measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label (available e.g. at RS-Components). For exact location of the Tc-point see drawing below.

Drawing



Safety Information

- The LED module itself and all its components may not be mechanical stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- When do you use more than one EFFECTlight and the OSRAM Connect System the construction of fixtures has to line up exactly the EFFECTlight- modules.

The LED Module incorporates no protection against: Short circuits, Overload, Overheating. Therefore it is absolutely necessary to operate the modules with a electronically stabilised power supply offering protection against the above mentioned safety risks. For dimming applications attention should be paid to specific references in "OPTOTRONIC Technical Guide".

OSRAM OPTOTRONIC power supplies are specifically designed with the necessary protection features for safe operation.

When using other power supplies other than OPTOTRONIC the following basic safety features are required, in addition to any other application specific concerns and local safety codes:

- Short circuit protection
- Overload protection
- Overheat protection
- Correct output voltage

- Correct electrical polarity needs to be observed. Wrong polarity will result in no light emission.
- Parallel connection is highly recommended as safe electrical operation mode.
  Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and demage the LED module.
- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Maximum of 14 modules can be connected together without supplemental power feed due to voltage drop and current carrying capacity.
- The EFFECTligth should be protected against UV- radiation in outdoor- applications.
- The module, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be honored as a materials defect claim. It is the user´s responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.

Assembly Information

- The electrical contact can be performed by OSRAM Connect System OS-WL-PIN, OS-WL-CONN (Connector block) and OS-WL-WIRE. Two wires can be soldered at the designated 2 soldering pads. 0,5 mm².
- Solder connections should only be performed on designated solder pads (marked "24V +/-"). During soldering, do not exceed the maximum soldering time of 10 seconds and the maximum soldering temperature of 260°C.
- EFFECTlight can be mounted by construction either a guide rail or clamping fixture which matches with the existing mounting groove of the module.
- Small scratches, bubbles or cavitations in lenses are production related and do not affect the optical functions of the EFFECTlight.
- Production related tolerances may cause a difference of the optical and mechanical axes. For sensitive applications there is important a possibility to adjust the modules by the fixture.

Ordering Guide

Productgroup	Productname	EAN *	S-Unit *
EFFECTlight	OS-WL01A-A1	4050300774824	10
EFFECTlight	OS-WL01A-Y1	4050300774886	10
EFFECTlight	OS-WL01A-V1	4050300774800	10
EFFECTlight	OS-WL01A-B1	4050300787923	10

*) EAN: Ordering number per single module
S-Unit: Modules per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

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Related and Further Information

The new dimension of light	(in preparation)
OPTOTRONIC Technical Guide	130 T08 E
OPTOTRONIC Data Sheets	www.osram.com