

Benefits

- Low profile
- Wide viewing angle
- Easy installation
- Available in various colors

Applications

- Border marker
- In-ground mounted luminaires
- Small signals

Technical Operating Data

| Product | Color | Number of LEDs | Voltage [V DC]* | Power [W]* | Current [A]* | Radiance Angle [°]* | Wavelength [nm] Color Temp [K]* | Lum. Flux [lm]* |
|--------------|--------|----------------|-----------------|------------|--------------|---------------------|---------------------------------|-----------------|
| CM01E-W2-854 | white | 9 | 24 | 1,2 | 0,05 | 120 | 5400 K | 16 |
| CM01E-A1 | red | 9 | 24 | 1,0 | 0,04 | 120 | 617 nm | 11 |
| CM01E-Y1 | yellow | 9 | 24 | 1,0 | 0,04 | 120 | 587 nm | 7 |
| CM01E-T2 | green | 9 | 24 | 1,2 | 0,05 | 120 | 525 nm | 16 |
| CM01E-B1 | blue | 9 | 24 | 1,2 | 0,05 | 120 | 470 nm | 1 |

*) 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

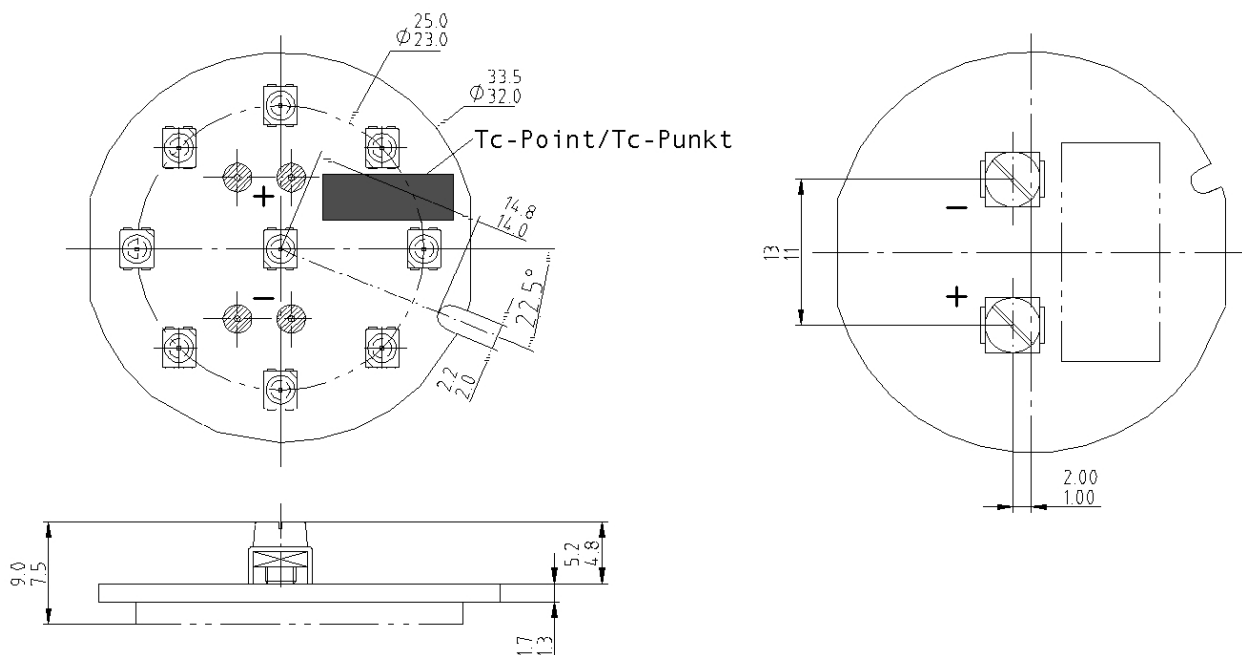
- Circular LED spot with 9 LED
- Diameter of the module: Ø 33 mm
- Very low profile (< 7mm)
- Light emission vertical to the mounting surface
- Viewing angle 120° per LED
- Connection with screw terminals
- Only parallel connection allowed
- Dimmable by pulse width modulation (PWM) with the electronic controller OT DIM
- Diverse OPTOTRONIC® controllgear with 1..10V, DALI, DMX or EASY protocoll available
- Modules optimized for use with OSRAM OPTOTRONIC® power supplies.

Minimum and Maximum Ratings

| Product | Operating Temperature at Tc-Point [°C] * | Storage Temperature [°C] * | Voltage Range [V dc] * | Reverse Voltage [V dc] * |
|--------------|--|------------------------------|--------------------------|----------------------------|
| CM01E-W2-854 | -30 ... 75 | -40 ... 85 | 23 ... 25 | 25 |
| CM01E-A1 | -30 ... 85 | -40 ... 85 | 23 ... 25 | 25 |
| CM01E-Y1 | -30 ... 85 | -40 ... 85 | 23 ... 25 | 25 |
| CM01E-T2 | -30 ... 75 | -40 ... 85 | 23 ... 25 | 25 |
| CM01E-B1 | -30 ... 75 | -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 needs to be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label. For exact location of the Tc-point see drawing below.

Drawing



Safety Information

- The LED module itself and all its components may not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.

The LED Module incorporates no protection against short circuits, overload or 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 protection features for safe operation.

When using 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
-
- 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.
 - 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 damage the LED module.
 - Pay attention to ESD steps when mounting the module
 - 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.
 - For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable protection class. The module can be protected against condensation water by treatment with an appropriate circuit board grade conformal coating. The conformal coating should have the following features:
 - Optical transparency
 - UV-resistance
 - thermal expansion matching the thermal expansion of the module $15-30 \cdot 10^{-6} \text{ cm/cm/K}$
 - low permeability of steam for all climatic conditions
 - resistance against corrosive environmentThe lacquer APL of the company Electro lube <http://www.electrolube.com> met the conditions for the COINlight® in our tests.

Assembly Information

- Rotation fixing by milled groove.
- Between bottom side and fixture housing should be an effective thermal contact.

Ordering Guide

| Productgroup | Productname | EAN * | S-Unit * |
|--------------|--------------|---------------|----------|
| COINlight® | CM01E-W2-854 | 4008321040107 | 25 |
| COINlight® | CM01E-A1 | 4050300857534 | 25 |
| COINlight® | CM01E-Y1 | 4050300947938 | 25 |
| COINlight® | CM01E-T2 | 4008321132642 | 25 |
| COINlight® | CM01E-B1 | 4050300947891 | 25 |

*) 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.

Sales and Technical Support

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Sales and technical support is given by the local OSRAM subsidiaries.
On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

Related and Further Information

- The new dimension of light
 - OPTOTRONIC® Technical Guide
 - OPTOTRONIC® Data Sheets
 - OSRAM LED systems
- 153 S006 GB
130 T008 GB
<http://catalog.myosram.com>
www.osram.com/led-systems