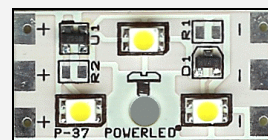


POWERLED® L3 is a module in the shape of rectangle having 30 x 15 x 4 mm in size, where 3 diodes LED of high lighting efficiency are installed. It can be used for spatial advertisement lighting (inside and outside), artistic and decorative lighting, evacuation or emergency lighting etc. Regardless of the light colour a module is supplied by standard voltage 12V DC.

POWERLED® L3 MODULE



| TECHNICAL PARAMETERS | | OPTICAL PARAMETERS ¹ | | | |
|--|--|---|-------------|----------------------------------|--|
| | | ¹ based on diode LED producer catalogue data | | | |
| Physical dimensions length/width/height | 30 mm x 15 mm x 4 mm (screw hole: 3,5mm) | Available colours | Symbol | Flux of light and angle of light | |
| | | white cold (ok. 5400K) | L3-WH-12-PS | typ. 14 lm | 2θ _{1/2} = 120° (for a single diode LED) |
| white warm (ok. 3200K) | L3-WW-12-PŻ | typ. 14 lm | | | |
| Module weight | ca. 3 g | blue | L3-BL-12-IS | typ. 6 lm | |
| | | green | L3-GR-12-MS | typ. 14 lm | |
| LED diodes quantity | 3 pcs. | yellow | L3-YL-12-OS | typ. 8 lm | |
| | | yellow NEW ! | L3-YL-12-OH | typ. 14 lm | |
| Way of fixing | silicon glue, sticky tape, mounting screw (hole diameter 3,5 mm) | orange | L3-OR-12-OS | typ. 8 lm | |
| | | orange NEW ! | L3-OR-12-OH | typ. 24 lm | |
| | | amber NEW ! | L3-AM-12-OH | typ. 14 lm | |
| | | red | L3-RD-12-SS | min. 6 lm | |

| ELECTRICAL PARAMETERS | | | | | | | |
|-----------------------|--------------------------------------|--------------------------------------|----------------------|--|---|--|-----------------------------------|
| Module type | Current input I _Z [mA] | Supply voltage U _Z [V] | Power input P [W] | Electrical efficiency factor ² : η [%] | Current change I _Z vs. voltage change U _Z factor ³ : I _U [%/%] | Current change I _Z vs. temperature change T factor ⁴ : I _T [%/K] | PWM modulation possibility |
| L3-WH-12-PS | ca. 23 mA | 12 VDC | ca. 0,3W | min. 80 % | max. 1 | typ. -0,3 $\frac{\%}{K}$ | yes f _{clock} ≤ 4 kHz |
| L3-WW-12-PŻ | ca. 23 mA | | ca. 0,3W | | | | |
| L3-BL-12-IS | ca. 23 mA | | ca. 0,3W | | | | |
| L3-GR-12-MS | ca. 25 mA | | ca. 0,3W | | | | |
| L3-YL-12-OS | ca. 40 mA | 12 VDC -25% +5% (!!!) | ca. 0,5W | min. 50 % | | | |
| L3-YL-12-OH | ca. 40 mA | | ca. 0,5W | | | | |
| L3-OR-12-OS | ca. 40 mA | | ca. 0,5W | | | | |
| L3-OR-12-OH | ca. 40 mA | | ca. 0,5W | | | | |
| L3-AM-12-OH | ca. 40 mA | | ca. 0,5W | | | | |
| L3-RD-12-SS | ca. 27 mA | | ca. 0,35W | | | | |

Explanatory note:

² The electrical efficiency factor (η) is assigned as, expressed in percentage, the proportion of power provided for diodes LED to total power consumed by a module (the higher rate of this factor the better, max. value is 100%).

³ Current change I_Z vs. voltage change U_Z factor (I_U) represents the relation of module LED current relative change as a result of supply voltage relative value change (the lower value the better, in good solutions the value of this factor does not exceed 1).

⁴ Current change I_Z vs. temperature change T factor (I_T) represents module LED current relative change (given in percentage) at the increase of temperature of 1 degree (the value of this factor should be very low, negative value proves the use of the current negative thermal compensation extending diodes LED life time).

POWERLED SP. Z O.O.
40-555 Katowice, ul. Rolna 43c
tel. +48 32 2023395, fax +48 32 2058130
NIP: PL6342579905

www.powerled.pl
www.softmaster.pl
e-mail: led@powerled.pl