

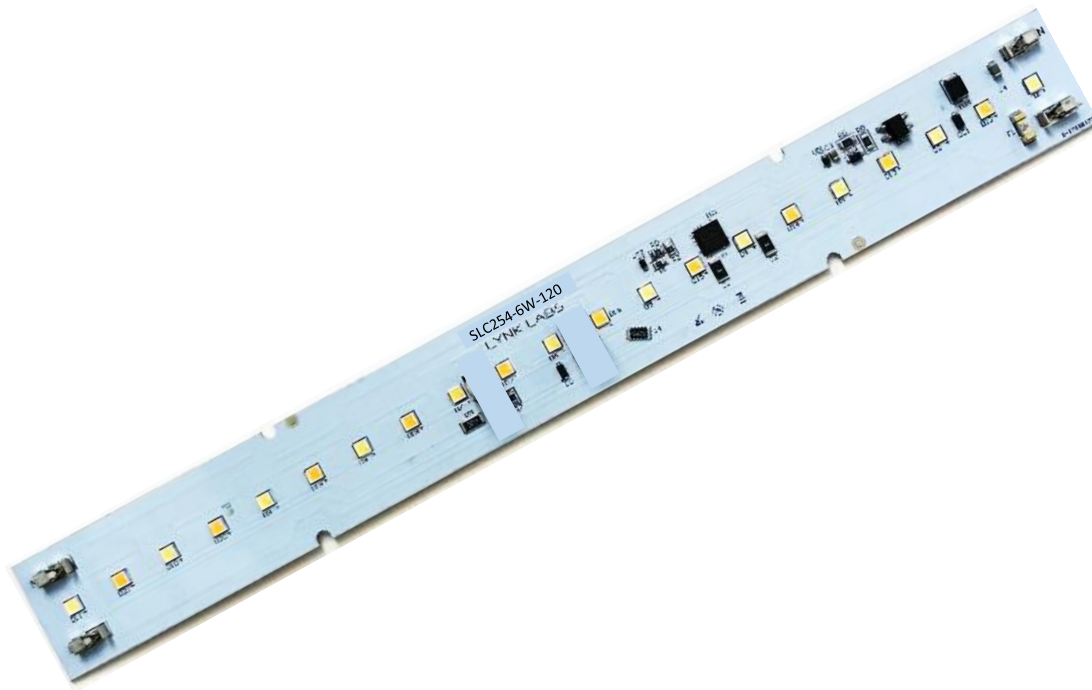


SnapBrite® SLC254-6W-__K(WD)-120

120VAC Direct Connect – AC LED Module
Straight-CCT & Warm-on-Dim Options,
254mm-L (10.0“) x 28mm-W (1.10“) x 5.25mm-H (0.21“)

6-Watt, 600 Lumen, 100 LPW

Technical Data Sheet





Direct Connect AC LED lighting Technology

SnapBrite® SLC254-6W-120

Description

The SLC254-6W-120 module utilizes Lynk Labs patented “Driver on Board” technology to provide a compact, self-contained, highly reliable, easy to install module that can connect directly to 120VAC mains.

This SLC254-6W-120 module is available in standard CCTs and in Lynk Labs patented Warm-On-Dim versions.

This module has been designed to meet the following standards; UL8750, CSA-C22.2 No 250, UL 94V0, RoHS, IEEE-1789.

This module is compatible with most ELV type Triac dimmers hooked in series with the power input.

This module is designed for long life based on the thermal performance of the fixture in which it is implemented. We recommend that the fixture be designed for a temperature $\leq 85^{\circ}\text{C}$ @ the thermal Test Points located on the module.

This module employs several Lynk Labs patents to cover the product from circuit to system. More information on Lynk Labs Intellectual Property is available at www.lynkylabs.com.

Features

- ✓ **6W; ~600 lumens @ 3000K, 92 CRI**
- ✓ **Direct Mains; 90 to 132 VAC**
- ✓ **Low Profile: 5.25mm (0.21”)**
- ✓ **Driver on Board – **Cost/Reliability****
- ✓ **Simple Installation**
- ✓ **Low THD**
- ✓ **Straight-CCT & Warm-On-Dim Options**
- ✓ **Phase-Cut Dimming**
- ✓ **Poke-In Connectors**
- ✓ **ETL Recognition to UL8750 & CAS; C22.2 #250 In-Process.**
- ✓ ***Patent Protected Circuit-to-System***

Applications

- **Sconces**
- **Under Cabinet**
- **Bath Bars**
- **Accent Lighting**
- **Task Lights**
- **Linear Lighting**
- **Architectural Lighting**

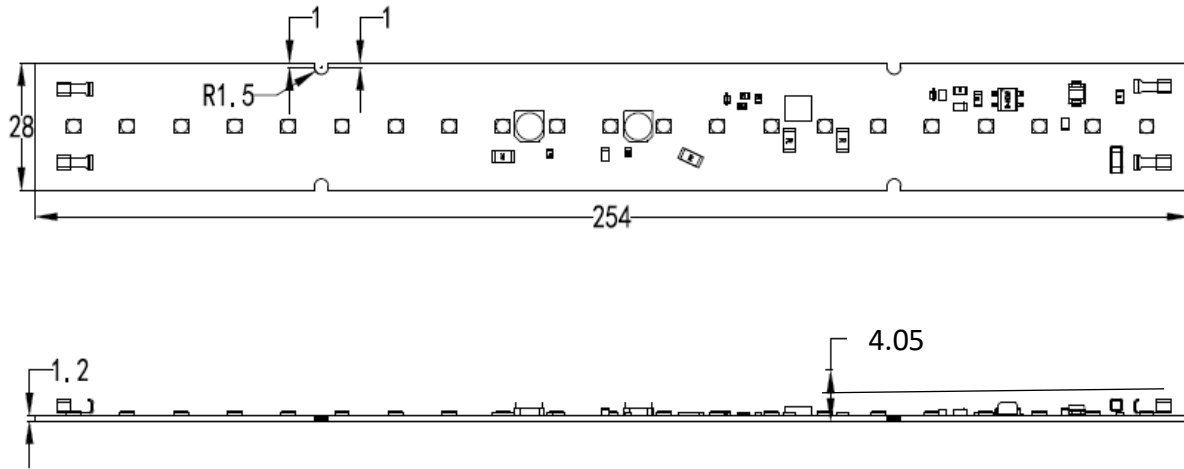


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Mechanical Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.05\text{mm}$ unless otherwise noted.



Electrical & Optical Characteristics

| Item | Symbol | Condition | Unit | Min. | Typ. | Max. |
|---------------------------|-----------------|------------------------|------------------|------|------|------|
| Drive Voltage | V _f | Connected to Line | V _{rms} | 100 | 120 | 132 |
| Viewing Angle | 2θ _½ | | Deg | | 120 | |
| Case Temperature | T _c | I _f = 55 mA | °C | | 70 | 90 |
| Life at Nominal Case Temp | | T _c ≤ 70°C | kHrs | | 50 | |
| Typical Operating Power | W _T | I _f = 55 mA | W | | 6.0 | |
| Luminous Flux (3000K) | Φ | | Lm | | 600 | |
| Total Harmonic Distortion | ATHD | | % | | ≤20 | |
| Luminous Efficacy (3000K) | η _v | | lm/W | | 100 | |

*Measurement Uncertainty of the Luminous Flux: ± 10%

*Values given are for specified drive current at 25°C case temperature

| Part Number Variants | CCT | CRI | Vac | Power | Lumen | R9 | LPW |
|-----------------------------|---------------------|-----|-----|-------|-------|-----|-----|
| SLC254028SS31P06W22KCH-120 | 2200K | ≥85 | 120 | 6.0 | 570 | >50 | 95 |
| SLC254028SS31P06W27KCH-120 | 2700K | ≥90 | 120 | 6.0 | 600 | >50 | 100 |
| SLC254028SS31P06W30KCH-120 | 3000K | ≥90 | 120 | 6.0 | 600 | >50 | 100 |
| SLC254028SS31P06W35KCH-120 | 3500K | ≥90 | 120 | 6.0 | 600 | >50 | 100 |
| SLC254028SS31P06W40KCH-120 | 4000K | ≥90 | 120 | 6.0 | 630 | >50 | 105 |
| SLC254028SS31P06W50KCH-120 | 5000K | ≥90 | 120 | 6.0 | 654 | >50 | 109 |
| SLC254028SS31P06W42WDCH-120 | 27K-22K Warm Dim | ≥90 | 120 | 6.0 | 600 | >50 | 100 |
| SLC254028SS31P06W52WDCH-120 | 30K-22K Warm Dim | ≥90 | 120 | 6.0 | 600 | >50 | 100 |

*Other CCTs may be Available to Special Order

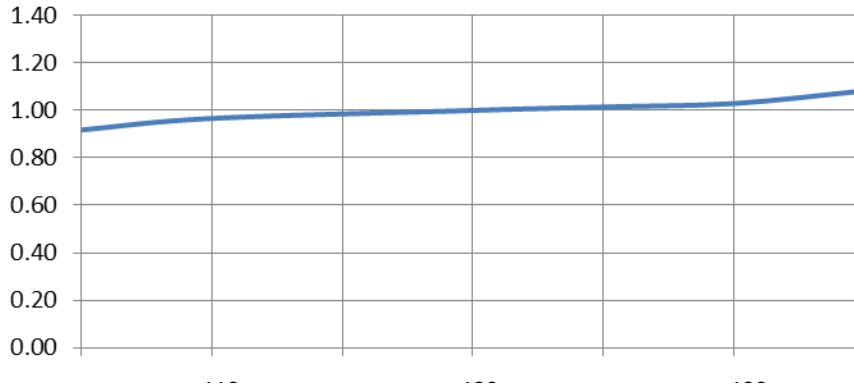
Absolute Maximum Ratings (@ Ta=25°C)

| Item | Symbol | Absolute Maximum Rating | Unit |
|-----------------------|------------------|-------------------------|-------------------|
| Power Dissipation | P _d | 6.5 | W |
| AC Current | I _f | 60 | mA _{rms} |
| AC Voltage | V _f | 132 | V |
| Operating Temperature | T _o | -25 to +70 | °C |
| Storage Temperature | T _s | -40 to +100 | °C |
| Soldering Temp (Hand) | T _{sld} | 370 | °C |

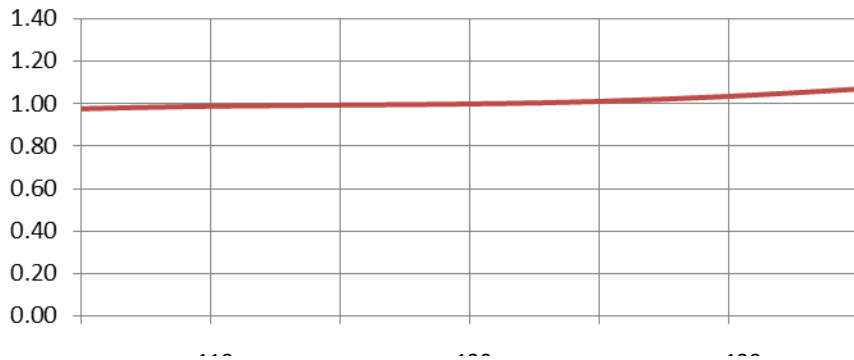


Typical Electrical & Optical Characteristic Curves

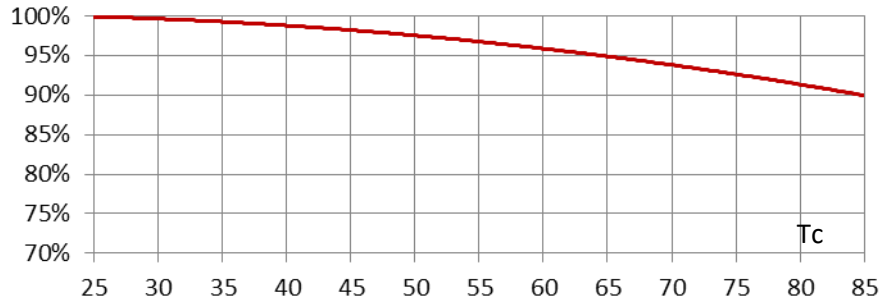
Relative Power vs Voltage



Relative Luminous Flux vs. Voltage



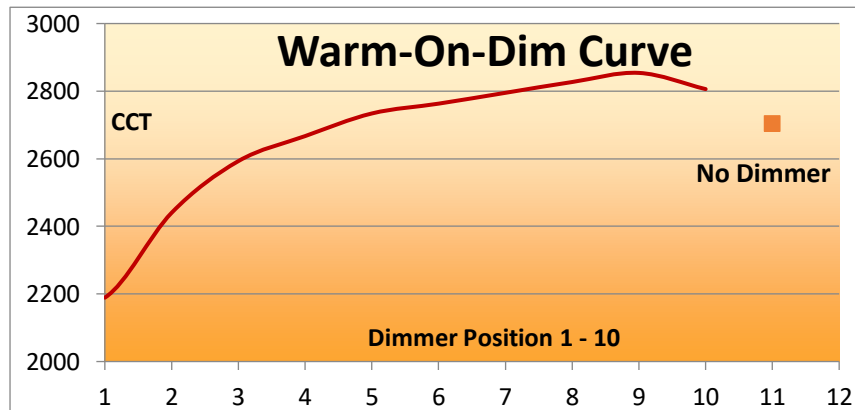
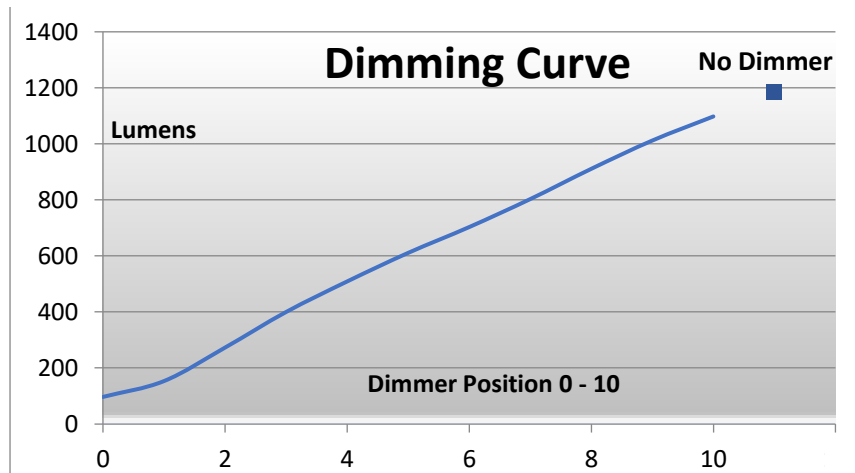
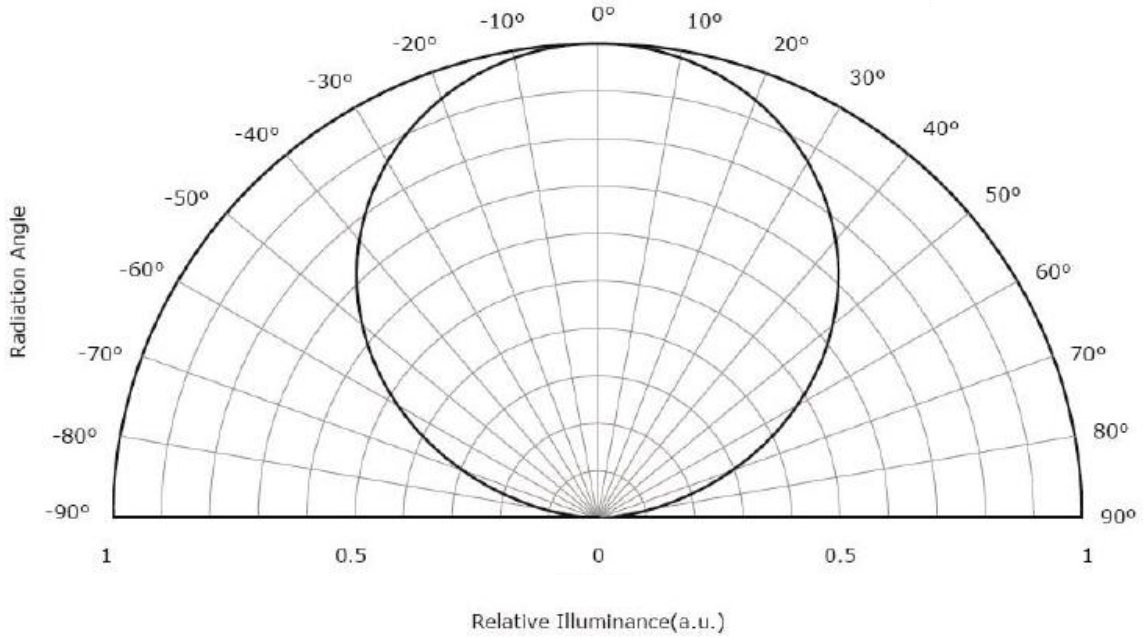
Lumen Thermal de-rating curve





Directivity

$T_A = 25^\circ\text{C}$





Part Number Identification

| SLC254 | SS31 | P | 06W | --K(WD) | C | H | - 120 |
|--------------------------------------|------------------------------|-------------------------------|-------------------|--|---|--------------------------------------|------------------------------|
| Module Type: 254mm Linear DoB™ | LED Type: 3030, 1W, 6V | Dimming Type: Phase Cut | Power: 6-Watts | Color Temperature: 22K = 2200K 27K = 2700K 30K = 3000K 35K = 3500K 40K = 4000K 50K = 5000K 42WD = 27K-22K WOD 52WD = 30K-22K WOD | Connection Type: I = IDC C = Poke-In W = Wire X = Solder | CRI L = ≥70 S = ≥80 H = ≥80 | Input Voltage: 120 Vac |

Installation

- 1) Product Name/produit masculin/producto masculino: **SLC254028SS31P06W__K(WD)CH-120**
- 2) Input/Entrée/Entrada: **120 VAC, 55 mArms, 6W, 60 HZ**
- 3) Dry Locations Only/Pour Emplacements Secs Seulement/Para lugares secos solo
- 4) Mount securely to a thermally conductive flat surface designed to achieve ≤85°C @ the TC test point/Monter solidement sur une surface plane thermoconducteur conçue pour atteindre ≤85 ° C @ le point d'essai de TC/Monte firmemente a una superficie plana térmicamente conductiva, diseñada para lograr el ≤85 ° C @ el punto de prueba de TC.

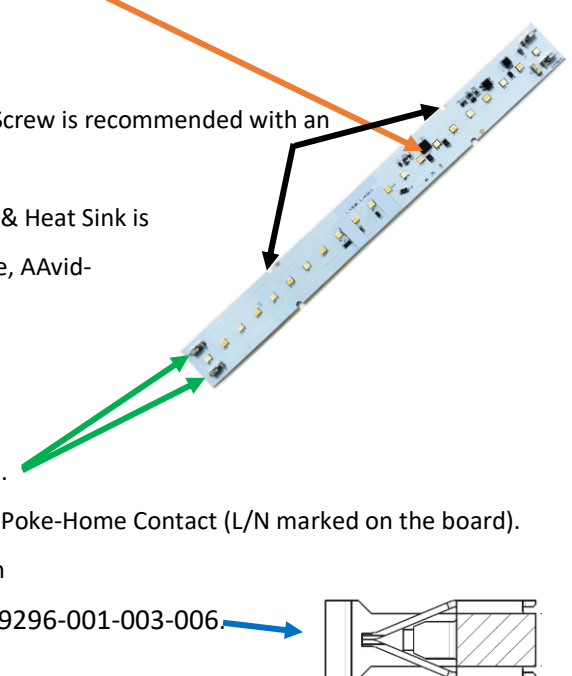
✓ Intended for factory installation only.

✓ Mount the module to the Fixture/Heat Sink.

- Use four pan-head screws with <3.2mm shaft. A #4-40 Screw is recommended with an insulating washer under the pan-head.
- The use of Thermal Bond Material Between the Module & Heat Sink is Recommended (3M-8805 Thermal Tape, Thermal Grease, Aavid-ThermalCote™ or Equivalent).

✓ Connect the AC-Voltage to the module.

- Direct Mains; 90 to 120 VAC only.
- 18 AWG Solid or Tinned-Stranded Wire is recommended.
- Poke-In the Line & Neutral wire to the appropriate AVX, Poke-Home Contact (L/N marked on the board). Minimize wire overhang. Trim Length = 4.5mm ± 0.5mm
- The Connector used is an AVX, Poke-Home, Part Number; 70-9296-001-003-006.





ETL Recognized UL9750 & CSA-C22.2; Report # *In-Process*

Cautionary Warnings:

- 1) Potentially Hazardous, High-Voltage is Present on the Top Surface of the Module!***
- 2) Do not attempt field Replacement of the module.***
- 3) Tampering with the module will void the UL Listing.***
- 4) The Module is Intended for Factory Installation Only.***
- 5) For In-Service Failures Contact the Fixture Manufacturer.***

Lynk Labs, Customer Service; 847-783-0123

***For information on Lynk Labs Intellectual Property employed in this product visit
www.lynkylabs.com***