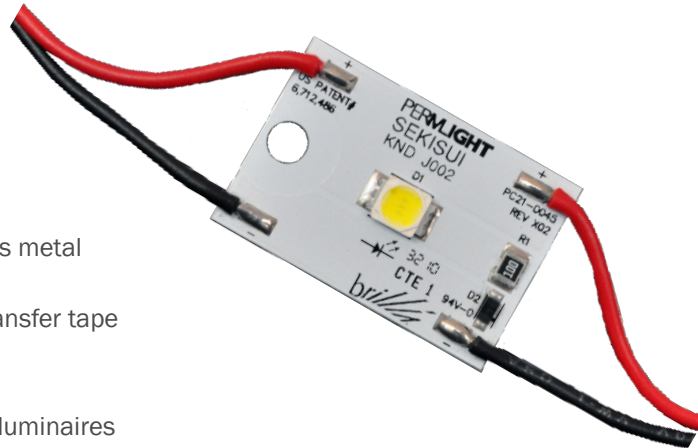


Features & Benefits

- Constant voltage design
- Protective transparent coating
- Patented intelligent thermal design uses metal core board (MCPCB)
- Includes high performance adhesive transfer tape
- Includes mounting hole for mechanical attachment and pre-wired leads
- Easily configured into existing and new luminaires
- Available in a variety of color temperatures
- Can be used to meet the requirements of CA Title 24, ENERGY STAR® and other green initiatives



Required Brillia LED Drivers

Any Brillia 12VDC constant voltage driver See Brillia LED driver specifications

Ratings and Performance Specifications

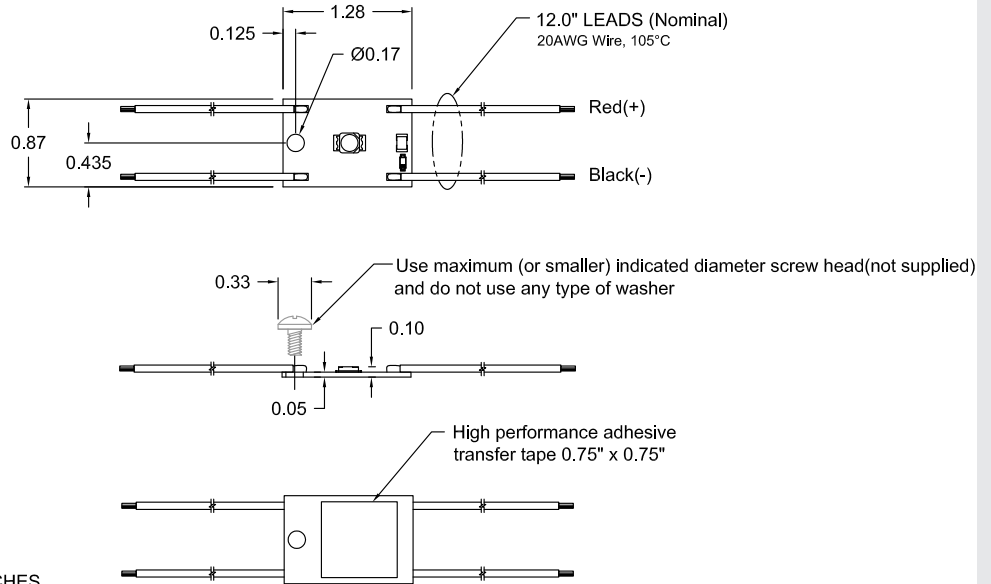
Nominal DC Power Consumption @ 12VDC	1.5W
Maximum Input Requirements.....	12.3VDC
Maximum Operating Range Ambient Temperature (Ta)	-40 to +50 °C
Maximum Solder Pad Temperature (Ts)	+105 °C
Maximum Screw Installation Torque.....	50 inch-ounces
Estimated Lumen Depreciation (LM80 standard)	70% of initial lumens (L ₇₀) at 40,000 hours
Maximum Weight	25 grams
Safety/Compliance	
UL Class 2 Recognized Component	E213411

Application Notes

1. The use of any washer (lock, flat, etc.) with the specified screw head will void the warranty due to possible damage and/or shorting to the circuit board.
2. The best thermal system performance is achieved by utilizing the supplied adhesive transfer tape or thermally conductive material between the module and heat sink.
3. The proper LED Solder Pad Temperature (Ts) is critical to ensure long life. Careful design consideration required for factors such as ambient conditions (for example weather and surrounding atmosphere inside exterior luminaires) and proximity to other heat sources such as other LED modules and heat generating LED drivers.
4. Abnormal operating conditions such as elevated operating temperatures can be expected to negatively impact lumen output, product lifetime, or product performance.



Physical Dimensions



DIMENSIONS ARE IN INCHES
 TOLERANCES:
 X.X = ± 0.1"
 X.XX = ± 0.01"
 X.XXX = ± 0.005"

Part Number	Nichia NS3x183R-H3 LED Package Bin	Nominal Values CCT Color Temp. (Kelvin)	Sample Values Light Output ^[2] (Lumens)	Sample Values Efficacy ^[2] (Lumens per Watt)	Sample Values CRI ^[1]	Nominal Beam Angle (Degrees)
BB01CF-20031-120020-01	SW27	2700	70	46	80	120
BB01CF-27031-120020-01	SW30	3000	75	50	80	120
BB01CF-21031-120020-01	SW35	3500	80	53	80	120
BB01CF-22031-120020-01	SW40	4000	80	53	80	120
BB01CF-24031-120020-01	SW50	5000	85	56	85	120

¹Higher CRI available by special order

²Sample value when used with compatible Brillia LED driver (40-12DC-A-100277 driver, eff 80%) sample heatsink

Options: sales@permlight.com

Other LED colors or LED manufacturers please email sales@permlight.com

Packaging

Modules are marked with abbreviated SKU and lot traceability information on non-LED side of module. Modules are sold 20 per carton and packaged in ESD bags with SKU and lot traceability information.

Warranty

3-Year limited warranty in accordance with Brillia published warranty. Product must be used with compatible Brillia components (modules, drivers, engines and/or accessories) and no maximum ratings (such as Ts) shall be exceeded during any expected operating conditions of the system.

Permlight Products Inc. holds the following United States patents of which one or more may be applicable to the design and/or manufacture of this product. Additional granted patents, patents pending and other intellectual property protection rights may apply to this product.

United States Patents: 6712486, 6578986, 6846093, 7114831, 7306353, 7102172, 7108396, 7329024, 7387406, 7582911, 7582911, 7649327

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