

Features & Benefits

- Patented intelligent thermal design uses metal core board
- Constant current design
- Patented “sandwich” design uses heatsink and integral mechanical and electrical interfaces to eliminate wiring harness
- Designed exclusively for use with Brillia LED drivers
- Available in different LED colors
- Easily configured into existing and new luminaires
- Can be used for requirements of CA Title 24, ENERGY STAR and other green initiatives



Compatible Brillia LED Drivers

AI1220-0.....See Brillia LED driver specifications

Ratings and Specifications

Input Requirements 350mA max.
 DC Power Consumption 3.5W max.
 Estimated Life for White LED @ $T_j \leq +90^\circ\text{C}$ 40,000 hours, 70% lumen maintenance
 Maximum Operating Ambient Temperature (T_a) $+50^\circ\text{C}$
 *Recommended Maximum Operating Junction Temperature (T_j) $+90^\circ\text{C}$
 Weight 2 grams
 Screw Installation Torque 50 inch-ounces
 Listings/recognitions UL Recognition of this component is in process, consult factory for status

Engineering Notes

The BB03 AE series LED module makes electrical and mechanical connection with Brillia LED drivers by 4-40 x 3/8” truss head screws and isolation bushings. The screw heads must be a minimum diameter of 0.250” in order to seat properly on the module and not damage the contacts. Brillia recommends the use of an aluminum or equivalent heatsink “sandwiched” between the LED module and driver with a nominal thickness of 0.080”. For thicker heatsinks, longer screws can be used, however caution must be used not to bottom-out and damage the internal PC board of the driver. The isolation bushings must be McMaster Carr 91145A129 or equivalent dimensions and material. Luminaires manufactured with this LED module series and compatible drivers have passed UL thermal testing. Please consult the factory for design recommendations.

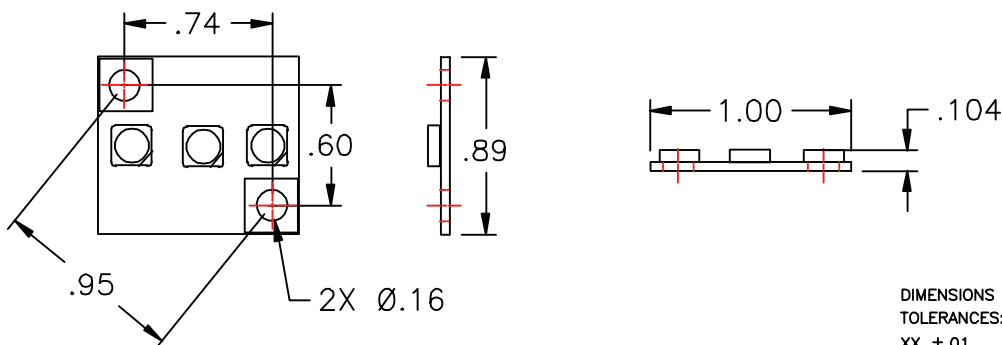
*The proper LED Junction Temperature (T_j) is critical to ensure long life; therefore careful design consideration is required for factors such as ambient conditions (weather and surrounding atmosphere in fixture) and proximity to other heat sources such as LED drivers and other LED modules.



A division of Permlight



Physical Dimensions



DIMENSIONS ARE IN INCHES
 TOLERANCES:
 XX ±.01 ANGLE ± 30'
 XXX ±.005

Phone: 714.508.0729 sales@brillialed.com

Part Number	LED Package Series	Nominal Values CCT Color Temp. (Kelvin)	Sample Values Light Output (Lumens)	Sample Values Efficacy (Lumens per Watt)	Sample Values CRI*	Nominal Beam Angle (Degrees)
BB03AE-20201-0000XX-01	Nichia 083B (SW27)	2850	157	35	68	120
BB03AE-21201-0000XX-01	Nichia 083B (SW35)	3500	179**	40**	72**	120
BB03AE-C0201-0000XX-01	Nichia 083B (Cbins)	5100	200	44	78	120

* Higher CRI available by special order

**Actual sample values of Light Engine tested to LM79 with AI1220 Series (120V) driver and sample heatsink

Options: sales@brillialed.com

Other LED colors, high CRI or LED manufacturersplease email sales@brillialed.com

Warranty

3 Year Limited warranty from date of manufacture with compatible Brillia LED driver for a maximum operating Tj of the LED module at 90 °Csee www.brillialed.com for additional conditions

Additional Information