

Features & Benefits

- Patented intelligent thermal design uses metal core board
- Patent pending AC dimming works with 3-wire electronic dimmers
- Patented “sandwich” design uses heatsink and integral mechanical and electrical interfaces to eliminate wiring harness
- 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



Ratings and Specifications

Power Consumption.....	3.5W nominal
Input Voltage	120VAC
Operating Frequency.....	50/60Hz
Estimated Life for White LED @ Tj ≤ +90 °C.....	40,000 hours, 70% lumen maintenance
Maximum Operating Ambient Temperature (Ta)	+50 °C
*Recommended Maximum Operating Junction Temperature (Tj)	+90 °C
Weight (driver and module only)	32 grams
AI1220 Series Driver UL File and Listing.....	E256806, cURus, UL recognized component, dry location
PZ Series Module UL File and Listing	E213411, cURus, UL recognized component, wet location

Engineering Notes

The LED module makes electrical and mechanical connection with the LED driver by 4-40 x 3/8” truss head screws and isolation bushings shipped with each light engine. 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. Luminaires manufactured with this LED light engine have passed UL thermal testing. Please consult the factory for design recommendations.

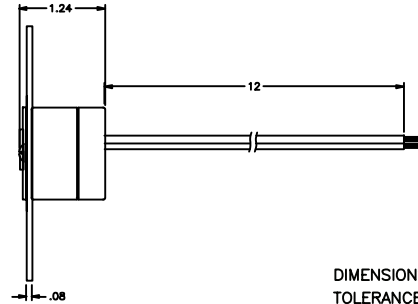
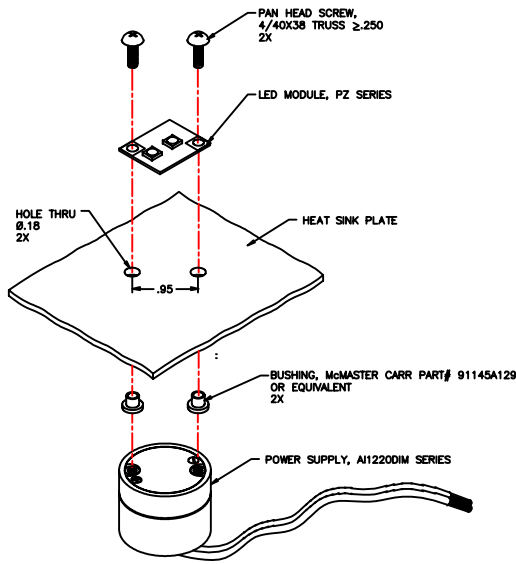
*The proper LED Junction Temperature (Tj) is critical to ensure long life, therefore careful design consideration is required for factors such as ambient conditions (weather and surrounding atmosphere in fixture) and proximity to other heat sources such as other LED drivers, modules or light engines.



A division of Permlight



Physical Dimensions



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

Part Number	Nominal Values CCT Color Temp. (Kelvin)	Sample Values Light Output (Lumens)	Sample Values Efficacy (Lumens per Watt)	Sample Values CRI*	Nominal Beam Angle (Degrees)	Input Voltage Dimmable (VAC)
BEP02AB120FDA28-001	2850	80	21	68	120	120***
BEP02AB120FDA35-001	3500	94**	24**	72**	120	120***
BEP02AB120FDA51-001	5100	107	28	78	120	120***

* Higher CRI available by special order

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

***See www.brillialed.com for compatible dimmer recommendations

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 for a maximum operating case temperature of the LED driver and maximum operating Tj of the LED module at 90 °Csee www.brillialed.com for additional conditions

Additional Information