## High Density <br> Very High Output Module For Point Source Applications

## Features and Benefits

- Scalable 4.5" diameter LED module up to 12,500 lumens
- Ideal for decorative luminaires: low bay, RLM, gooseneck
- Dual circuit board can use two drivers to improve lifetime
- Latest generation LED, high efficacy and color consistency
- Patented thermal design uses metal core printed circuit board (MCPCB) for thermal transfer and simple installation
- 18 " pre-wired pigtails, mechanically robust and reduce labor
- Clean wire exits through valence holes
- 3M 468MP peel \& stick tape on back and 4 mounting holes
- Conformal (transparent) coating for exterior applications


## Compatible LED Drivers

Recommended Maximum DC Input Current to Module 2100 mA

Typical DC input Voltage to Module See Table 1

Ratings and Performance Specifications

| Nominal DC Power Consumption | Table 1 |
| :---: | :---: |
| Recommended Screw Installation Torque ........................................... 10-inch pounds |  |
| Maximum Operating Range Ambient Temperature (Ta) ........................... 40 to $+60^{\circ} \mathrm{C}$ |  |
| Maximum Solder Pad Temperature (Ts) | $+105^{\circ} \mathrm{C}$ |
| Estimated Lumen Depreciation (TM-21) ..............70 | @ 100,000 hours |
| Nominal Weight | 100 grams |
| Safety/Compliance UL Class 2 Recognized Com | E321468 |

## Application Notes

1. The use of any washer (lock, flat, etc.), will void the warranty due to possible damage and/or shorting of LED and/or circuit board.
2. This module requires heatsinking at full power. The luminaire design should allow heat to escape the system. Forzlux provides thermal testing of light engines in the luminaire for OEM customers to ensure long life and compliance with warranty.
3. Abnormal operating conditions such as elevated ambient temperatures can negatively impact lumen output, product lifetime and/or performance.

Physical Dimensions


Table 1, Performance Characteristics at $25^{\circ} \mathrm{C}$
Data from laboratory test measurements, actual results may vary.

| Part Number | Nominal CCT <br> (Kelvin) | Min. CRI | Nominal <br> Light <br> Output <br> (Lumens) | erforman <br> Forward <br> Voltage <br> (VDC) | Power <br> (WDC) | 050mA <br> Efficacy <br> (LPWDC) | Nominal P Light Output (Lumens) | Performan <br> Forward <br> Voltage <br> (VDC) | Power <br> (WDC) | 100 mA <br> Efficacy <br> (LPWDC) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BB132AH-20-80-01 | 2000 | 80 | 4,050 | 36.0 | 37.8 | 107 | 7,970 | 36.6 | 76.9 | 104 |
| BB132AH-27-80-01 | 2700 | 80 | 5,800 | 36.0 | 37.8 | 153 | 11,400 | 36.6 | 76.9 | 148 |
| BB132AH-30-80-01 | 3000 | 80 | 6,000 | 36.0 | 37.8 | 159 | 11,800 | 36.6 | 76.9 | 154 |
| BB132AH-35-80-01 | 3500 | 80 | 6,000 | 36.0 | 37.8 | 159 | 11,800 | 36.6 | 76.9 | 154 |
| BB132AH-40-80-01 | 4000 | 80 | 6,090 | 36.0 | 37.8 | 161 | 11,980 | 36.6 | 76.9 | 156 |
| BB132AH-50-80-01 | 5000 | 80 | 6,390 | 36.0 | 37.8 | 169 | 12,570 | 36.6 | 76.9 | 164 |

## Options available

Wire exit from outside edge of module, custom lead lengths.
90 CRI minimum on special order, subtract $13 \%$ lumens.
Lower power, lower cost, higher efficacy versions.
Lower power monochromatic or mixed colors: red, green, blue, yellow, and amber.

## Packaging

Sold in groups of (4).
Packaged in ESD bags with SKU and lot information.

## Warranty

5 -Year limited warranty in accordance with published warranty conditions. Product must be used with compatible components (modules, drivers, engines and/or accessories) and no maximum ratings (such as Ts) shall be exceeded during any operating conditions of the system. If product is used with other manufacturer's product, compatibility must be recognized in writing by Forzlux.

Forzlux owns the following United States patents of which may be applicable to the design or manufacture of this product: 6712486, 6578986, 6846093, 7114831, 7306353, 7102172, 7108396, 7329024, 7387406, 7582911, 7649327, 8926145, 8729810. Additional granted patents, patents pending, and other IP protection rights may apply.

