

## COB Replacement High Density Module For Point Source Applications

### Features and Benefits

- 1.38" square module is scalable up to 30 LEDs for "tuning" to exact design specifications
- High efficacy family of modules replaces COB with lower cost, higher efficacy, lower LED junction temperature and longer life
- Ideal for point source luminaires: pendants, sconces, bowl chandeliers, close-to-ceiling and high end architectural
- Mounting notches are similar pattern to industry standard COB
- Patented intelligent thermal design uses metal core printed circuit board (MCPCB) for thermal transfer, simple installation
- Pre-wired pigtailed are mechanically robust and reduce labor



BB30VK SERIES

### Compatible LED Drivers

Recommended Maximum DC Input Current to Module .....	1050mA
Typical DC input Voltage to Module .....	30V

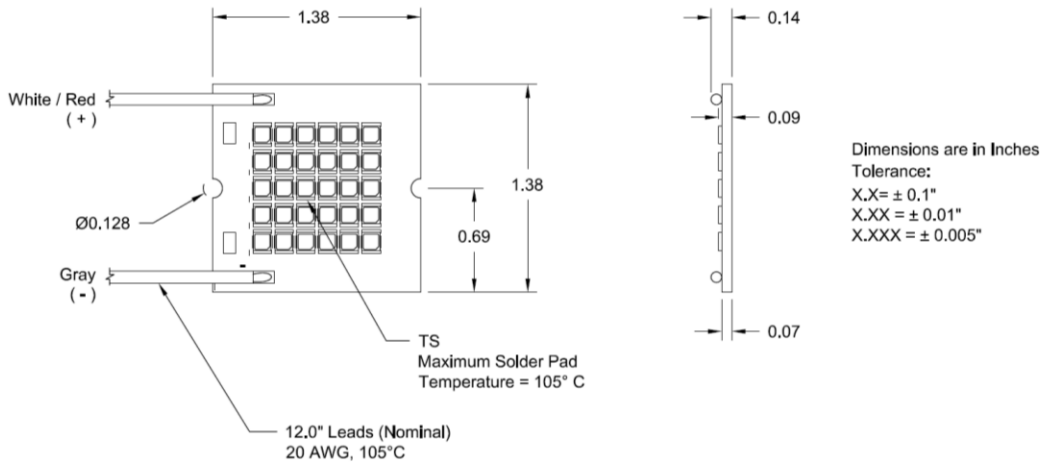
### Ratings and Performance Specifications

Nominal DC Power Consumption .....	See Table 1
Recommended Screw Installation Torque .....	75 inch pounds
Maximum Operating Range Ambient Temperature (Ta) .....	-40 to +50°C
Maximum Solder Pad Temperature (Ts) .....	+105°C
Estimated Lumen Depreciation (TM-21) ...70% initial lumens (L70) @ 100,000 hours	
Nominal Weight .....	18 grams
Safety/Compliance UL Class 2 Recognized Component .....	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°C**

Data from laboratory test measurements, actual results may vary.

Part Number	Designed to Replace	Nominal CCT (Kelvin)	Minimum CRI	Nominal Light Output @ 1050mA (Lumens)	Nominal Power Consumption @ 1050mA (WDC)	Nominal Module Efficacy (DC LPW)
BB30VK-20-80-01	HPS	2000	80	2,876	31.5	91
BB30VK-27-80-01	Incandescent	2700	80	4,297	31.5	136
BB30VK-30-80-01	Halogen	3000	80	4,463	31.5	142
BB30VK-35-80-01	Halogen	3500	80	4,463	31.5	142
BB30VK-40-80-01	Flourescent	4000	80	4,529	31.5	144
BB30VK-50-80-01	Metal Halide	5000	80	4,760	31.5	151

### Options available

Other CCT and CRI may be available on special order.  
90CRI minimum versions on special order, subtract 15% lumens.

### Packaging

Product is marked with SKU and lot information on non-LED side of module.  
Sold in groups of (48) unit(s) and 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.