

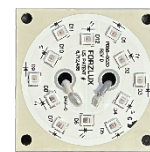
Small Square Format High Output Module For a Variety of Applications

Features and Benefits

- 1.62" square format for small fixtures such as commercial or decorative downlight, lantern, sconce and high-end architectural luminaires
- **TFA (Turtle Friendly Amber)** version is AlInGaP LED with narrow wavelength, Florida Wildlife Commission (FWC) compliant
- Pre-wired 12" pigtails are mechanically robust and reduce labor
- Protective conformal (transparent) coating for exterior applications
- Includes mounting holes and 3M 468MP peel & stick tape
- Compatible with Forzlux drivers:
 - PS14-350C-DUALDIM-UNV-PP for whites
 - 120-277VAC, ELV/triac/0-10V dim
 - PS6-350C-DUALDIM-UNV-PP-**250MA** for all colors
 - 120-277VAC, ELV/triac/0-10V dim



Whites



TFA

BB12RD SERIES

Compatible LED Drivers

Recommended Maximum DC Input Current to Module	See Table 1
Typical DC input Voltage to Module	See Table 1

Ratings and Performance Specifications

Nominal DC Power Consumption	See Table 1
Recommended Screw Installation Torque	75 inch ounces
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	15 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

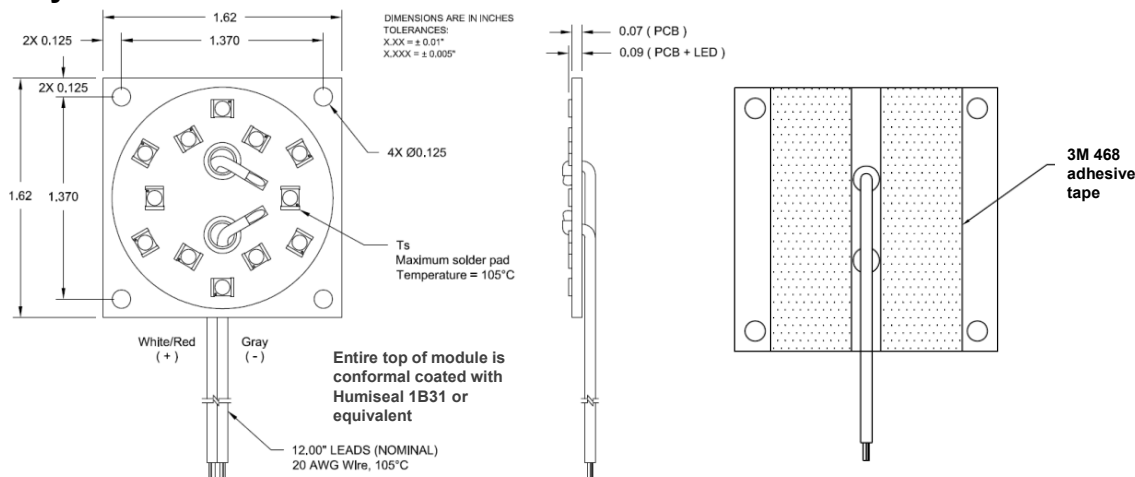


Table 1, Performance Characteristics at 25°C

Data from laboratory test measurements, actual results may vary.

Part Number	Typical CCT/DWL (Kelvin/nm)	Min CRI	Max Current (ADC)	Typical VF (VDC)	Typical Power (WDC)	Typical Lumens (DC LPW)	Typical Efficacy (DC LPW)
BB12RD-20-80-01	2000	80	350	37.2	13.0	1,458	112
BB12RD-25-80-01	2500	80	350	37.2	13.0	1,690	130
BB12RD-27-80-01	2700	80	350	37.2	13.0	2,025	156
BB12RD-30-80-01	3000	80	350	37.2	13.0	2,100	161
BB12RD-35-80-01	3500	80	350	37.2	13.0	2,128	163
BB12RD-40-80-01	4000	80	350	37.2	13.0	2,188	168
BB12RD-50-80-01	5000	80	350	37.2	13.0	2,230	171
BB12RD-65-80-01	6500	80	350	37.2	13.0	2,160	166
BB12RD-TFA-01	595	n/a	250	13.2	3.3	258	78
BB12RD-RED-01	622	n/a	250	13.2	3.3	230	70
BB12RD-GREEN-01	527	n/a	250	20.4	5.1	440	86
BB12RD-BLUE-01	470	n/a	250	18.0	4.5	120	27

Multiplier for less LED variants for VF, watts, lumens: BB08RD (0.67), BB10RD (0.83)

Options and Packaging

90CRI minimum versions on special order, subtract 15% lumens.

Sold in groups of (35) 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 Forflux.

Forflux 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.