# Small Rectangle Format High Output Module For Linear Source Applications



#### **Features and Benefits**

- 1.0" x 0.4" linear module for applications such as landscape, pathway, step, and pendants
- TFA (Turtle Friendly Amber) version is AllnGaP LED with narrow wavelength, Florida Wildlife Commission (FWC) compliant
- Pre-wired pigtails are mechanically robust and reduce labor
- 3M 468MP peel & stick tape on back, reduces labor and hardware
- Protective conformal (transparent) coating for exterior applications
- Compatible with Forzlux drivers:
  - PS11 Series low voltage 12VAC landscape
  - PS3-350C Series 120VAC ELV/triac dimmable
  - PS6-350C Series 120-277VAC, ELV/triac, 0-10V dimmable



#### **Compatible LED Drivers**

Recommended Maximum DC Input Current to Module	See	Table 1
Typical DC input Voltage to Module	See 7	Table 1

## **Ratings and Performance Specifications**

Nominal DC Power Consumption	See Table 1
Recommended Screw Installation Torque	Do NOT use screw!
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 (I	_70) @ 100,000 hours
Nominal Weight	7 grams
Safety/Compliance UL Class 2 Recognized Component	E321468

## **Application Notes**

- 1. The use of any screw, washer (lock, flat, etc.), will void the warranty due to possible damage and/or shorting of LED and/or circuit board.
- 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**

Entire top of module is conformal coated with Humiseal 1B31 or equivalent.

3M 468MP peel & stick tape on back of module, clean heatsink surface with isopropyl alcohol.



0.63" Nominal PCB thickness

0.4"

Tolerances: 0.X ± 0.05 0.XX ± 0.005

Ts measurement point is cathode of center LED.

3" nominal length leads, 22 AWG stranded, strip ends 0.063", red (+), black (-).

CCT/CRI or color silkscreened on top of PCB, examples: "27K/80", "TFA", "RED".

Table 1, Performance Characteristics at 25°C

Data from laboratory test measurements, actual results may vary.

	Typical		Max	<b>Typical</b>	<b>Typical</b>		
	CCT/DWL	Min	Current	VF	Power	Typical	Efficacy
Part Number	(Kelvin/nm)	CRI	(ADC)	(VDC)	(WDC)	Lumens	(DC LPW)
BB03AB-18- <b>70</b> -01	1800	70	0.45	8.7	3.9	456	117
BB03AB-20-70-01	2000	70	0.45	8.7	3.9	501	128
BB03AB-22-80-01	2200	80	0.45	8.7	3.9	503	129
BB03AB-25-80-01	2500	80	0.45	8.7	3.9	520	133
BB03AB-27-80-01	2700	80	0.45	8.7	3.9	569	145
BB03AB-30-80-01	3000	80	0.45	8.7	3.9	580	148
BB03AB-35-80-01	3500	80	0.45	8.7	3.9	591	151
BB03AB-40-80-01	4000	80	0.45	8.7	3.9	612	156
BB03AB-50-80-01	5000	80	0.45	8.7	3.9	617	158
BB03AB-65-80-01	6500	80	0.45	8.7	3.9	615	157
BB03AB-TFA-01	595	n/a	0.35	6.6	2.3	235	102
BB03AB-RED-01	622	n/a	0.35	6.6	2.3	218	94
BB03AB-GREEN-01	527	n/a	0.35	10.2	3.6	360	101
BB03AB-BLUE-01	470	n/a	0.35	8.8	3.1	111	36

## **Options and Packing**

90CRI minimum versions on special order, 83% of 80CRI lumens.

Manufactured in groups of (242) 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.

