

# **Narrow High Output Module** For Linear Applications

#### **Features and Benefits**

- Ideal for step or stair linear architectural luminaires
- 3" long modules, narrow 0.5" width, high efficacy linear family of modules
- LED spacing optimized to provide continuous illumination
- Low cost and weight FR4 PCB, no aluminum to corrode
- 3M 468MP peel & stick tape for mechanical attachment
- Latest generation LED for high efficacy and color consistency
- Convenient extra long pre-wired pigtails are mechanically robust and less labor
- Protective conformal (transparent) coating for exterior applications



#### Compatible LED Drivers

Maximum DC Input Current to Module	. 350mA
Typical DC Input Voltage to Module	18.3V

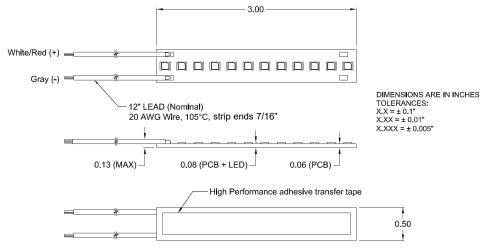
### Ratings and Performance Specifications

Nominal DC Power Consumption	See Table 1
Recommended Screw Installation Torque	. Not applicable
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) @	0 100,000 hours
Nominal Weight	14 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**



Ts measurement point is cathode of center LED
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.

Table 1, Performance Characteristics at 25°C

Data from laboratory test measurements, actual results may vary.

Part Number	Nominal CCT (Kelvin)	Minimum CRI	Nominal Light Output @ 350mA (Lumens)	Nominal Power Consumption @ 350mA (WDC)	Nominal Module Efficacy @ 350mA (DC LPW)
BB12SL-20-80-01	2000	80	695	6.4	109
BB12SL-27-80-01	2700	80	993	6.4	155
BB12SL-30-80-01	3000	80	1027	6.4	160
BB12SL-35-80-01	3500	80	1052	6.4	164
BB12SL-40-80-01	4000	80	1058	6.4	165
BB12SL-50-80-01	5000	80	1105	6.4	173

### **Options available**

Custom lead lengths, other CCT available on special order. 90CRI minimum versions on special order, subtract 15% lumens.

### **Packaging**

Sold in groups of (54) units 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.

