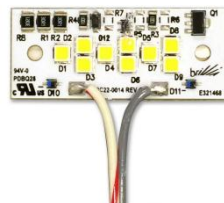


Small Thermadjust™ Module For a Variety of Applications

Features and Benefits

- Constant voltage 12VDC input design allows paralleling of any number of modules up to the maximum wattage of driver
- Patent pending Thermadjust™ temperature compensation technology provides “fool proof” thermal management
- Latest generation LED for high efficacy and color consistency
- Patented intelligent thermal design FR4 core board with heavy copper
- Includes mounting holes and high performance 3M 468MP peel & stick tape for mechanical attachment
- Reverse polarity protection and pre-wired leads
- Protective conformal (transparent) coating for exterior applications



Compatible LED Drivers

Typical DC input Voltage to Module 12VDC

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 10 grams
 Safety/Compliance UL Class 2 Recognized Component E321468

Application Notes

1. Thermadjust™ technology automatically reduces LED current to maintain solder pad temperatures below the maximum solder pad temperature (Ts). This ensures longer LED lifetime and is ideal for luminaires that have the potential to be placed in environments with elevated ambient temperatures.
2. 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.
3. Abnormal operating conditions such as elevated ambient temperatures can negatively impact lumen output, product lifetime and/or performance.

Physical Dimensions

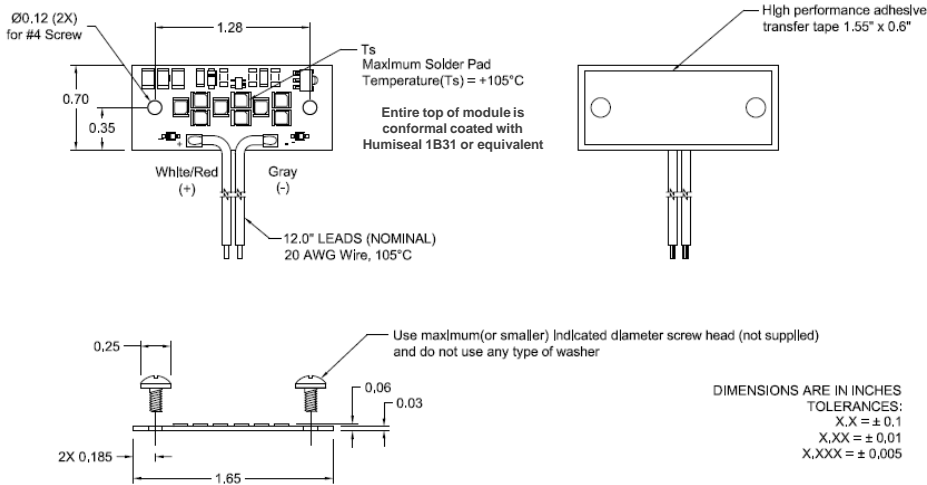


Table 1, Performance Characteristics at 25°C

Data from laboratory test measurements, actual results may vary.

Part Number	Nominal CCT (Kelvin)	Minimum CRI	Nominal Light Output @ 12VDC (Lumens)	Nominal Power Consumption @ 12VDC (WDC)	Nominal Module Efficacy @12VDC (DC LPW)
BB09BA-27-80-01	2700	80	322	3.06	105
BB09BA-30-80-01	3000	80	332	3.06	109
BB09BA-35-80-01	3500	80	341	3.06	111
BB09BA-40-80-01	4000	80	341	3.06	111
BB09BA-50-80-01	5000	80	361	3.06	118

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 (85) 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.