

Donut Format High Output Module For Pendant Applications

Features & Benefits

- 3.5" diameter with 1.25" center hole for round luminaires
- Ideal for commercial or decorative luminaires: close to ceiling, drums, pendants, sconces, etc.
- LED spacing optimized to provide continuous illumination when using frosted or opaque lens
- 90 CRI version meets California Title 24, 80 CRI meets DLC
- Requires no heatsink at 40°C ambient in most luminaires
- Lumens/power can be doubled for exterior applications up to 50°C with proper heatsink, consult factory
- Compatible with Permlight PS12 and PS18 series drivers



Compatible LED Drivers or Modules

Recommended Maximum DC Input Current to Module 350mA
Typical DC input Voltage to Module..... 32V

Ratings and Performance Specifications

Nominal Power Consumption @ 120VAC See Table 1
Recommended Screw Installation Torque 75 inch ounces
Maximum Operating Range Ambient Temperature (Ta) -40 to +40°C
Maximum Solder Pad Temperature (Ts) +105°C
Estimated Lumen Depreciation (TM-21) 70% initial lumens (L70) @ 100,000 hours
Nominal Weight 100 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 to the circuit board.
2. Although module is designed with an integrated heat sink, care should be taken in luminaire design to allow heat to escape. Contact factory for thermal guidelines.
3. Abnormal operating conditions such as elevated ambient temperatures can be expected to negatively impact lumen output, product lifetime and/or performance.

Physical Dimensions

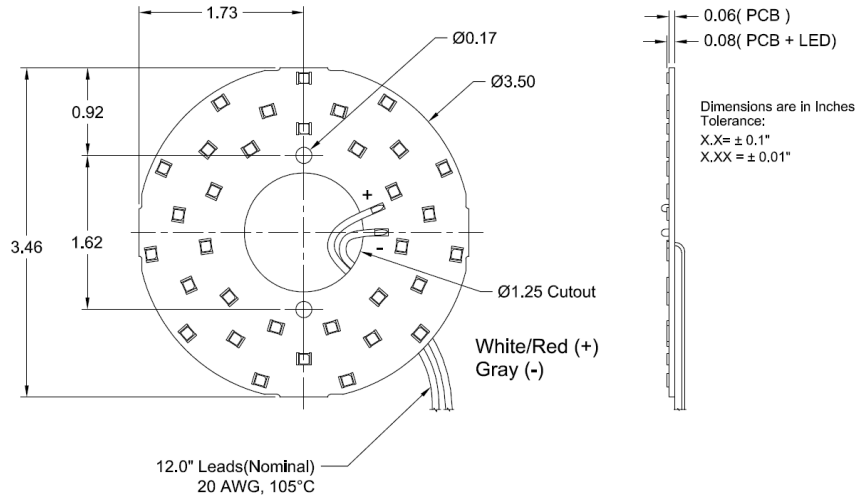


Table 1, Performance Characteristics at 25C

Data from laboratory test measurements, actual results may vary

Part Number	Nominal CCT (Kelvin)	Nominal Minimum CRI	Nominal Light Output @350mA (Lumens)	Nominal Power	Nominal Module Efficacy
				@ 350mA (WDC)	@ 350mA (DC LPW)
BB33UP-27-80-01	2700	80	1677	10.5	160
BB33UP-30-80-01	3000	80	1746	10.5	166
BB33UP-35-80-01	3500	80	1798	10.5	171
BB33UP-40-80-01	4000	80	1826	10.5	174
BB33UP-50-80-01	5000	80	1994	10.5	190

Options available

Other power ratings, number of LED, CCT and CRI available on special order
90 CRI minimum available on special order 2700K - 4000K only, subtract 25% lumens

Packaging

Product is marked with SKU and lot information on non-LED side of module.
Sold in groups of (6) 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 expected operating conditions of the system. If product is used with other manufacturer's product, compatibility must be recognized in writing by Permlight Technologies.

Permlight Technologies owns the following United States patents of which one or more may be applicable to the design and/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.