

Product Overview

An electrically isolated star capable of delivering over 500 lumens, the Endor Star combines high brightness with ease of integration into fixtures and OEM applications. The LuxDrive Endor StarTM features the LUXEON[®] Rebel emitter, and a footprint compatible with the LUXEON[®] Star. Inherent electrical isolation means thermal interface materials are not required to be electrically insulative. The Endor StarTM is available in single white, neutral white, warm white, or tri-emitter white, neutral white, warm white, red, blue, green, and amber configurations. The Endor StarTM is also available in an RGB tri-emitter configuration.



Features

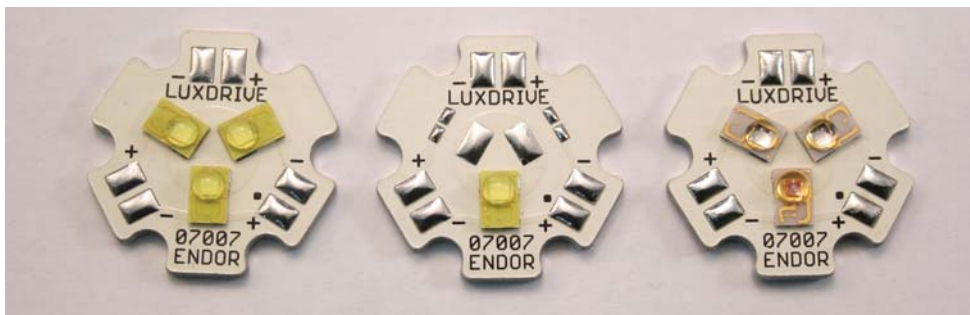
- Electrically isolated heat sinking surface
- Pb free reflow solder connections
- RoHS Compliant
- Autoclave compliant JESD22 A-102
- Thin, low profile package
- Simple, clearly marked electrical connections
- Superior life span and reliability
- Energy efficient
- Easy mounting

Typical Applications

- Solar & Landscape Lighting
- Architectural Lighting
- General Illumination
- Automotive & Marine Lighting
- Point of Purchase Lighting
- Signal & Marker Lighting
- Cabinet & Display Case Lighting
- Sign Lighting
- Flashlights

MADE IN

U. S. A.



RoHS
Compliant
2002/95/EC

Luminous Flux

The Endor StarTM is available with a single or tri-emitter configuration. The color code and luminous flux figures are adapted from the LUXEON® Rebel data sheet.

Typical Luminous Flux at LED Junction Temperature of 25°C

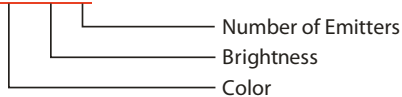
| Part Number | Color | Number of LEDs | Min. Lumens at 350mA | Typ. Lumens at 700mA |
|---------------|------------------|----------------|----------------------|----------------------|
| 7007-PWC-08-1 | Cool White | 1 | 80 | 145 |
| 7007-PWC-08-3 | Cool White | 3 | 240 | 435 |
| 7007-PWC-09-1 | Cool White | 1 | 90 | 160 |
| 7007-PWC-09-3 | Cool White | 3 | 270 | 480 |
| 7007-PWC-10-1 | Cool White | 1 | 100 | 180 |
| 7007-PWC-10-3 | Cool White | 3 | 300 | 540 |
| 7007-PWN-08-1 | Neutral White | 1 | 80 | 145 |
| 7007-PWN-08-3 | Neutral White | 3 | 240 | 435 |
| 7007-PWN-09-1 | Neutral White | 1 | 90 | 180 |
| 7007-PWN-09-3 | Neutral White | 3 | 270 | 480 |
| 7007-PWN-10-1 | Neutral White | 1 | 100 | 180 |
| 7007-PWN-10-3 | Neutral White | 3 | 300 | 540 |
| 7007-PWW-06-1 | Warm White | 1 | 60 | 110 |
| 7007-PWW-06-3 | Warm White | 3 | 180 | 330 |
| 7007-PWW-07-1 | Warm White | 1 | 70 | 130 |
| 7007-PWW-07-3 | Warm White | 3 | 210 | 390 |
| 7007-PWW-08-1 | Warm White | 1 | 80 | 145 |
| 7007-PWW-08-3 | Warm White | 3 | 240 | 435 |
| 7007-RGB-01-3 | Red, Green, Blue | 3 | N/A | N/A |
| 7007-PB0-01-3 | Blue | 3 | N/A | N/A |
| 7007-PD0-01-3 | Red | 3 | N/A | N/A |
| 7007-PM0-01-3 | Green | 3 | N/A | N/A |
| 7007-PL0-01-3 | Amber | 3 | N/A | N/A |

Custom units available upon request. Contact LUXdrive for additional details.

See LUXEON® Rebel data sheet for more details

Part Number Identification

7007-PXX-YY-Z



Temperature Ratings

| Color | Number of LEDs | Thermal Resistance (LED junction to bottom of MCPCB) |
|--------------|-----------------------|---|
| White | 1 | 13 °C/W |
| White | 3 | 6.3 °C/W |
| RGB | 1 | 15 °C/W |
| RGB | 3 | 7 °C/W |

Storage Temperature..... <135°C

Recommended Operating Temperature (T_{opr})..... <135°C³

See LUXEON Rebel data sheet for more details

³Junction temperature

Drivers

LuxDrive offers a line of drivers designed for use with high-power LED modules such as the EndorStarTM. The choice of driver will depend upon number of modules to be driven, the input voltage source, and the desired forward drive current. See the full line of LuxDrive products at www.luxdrive.com

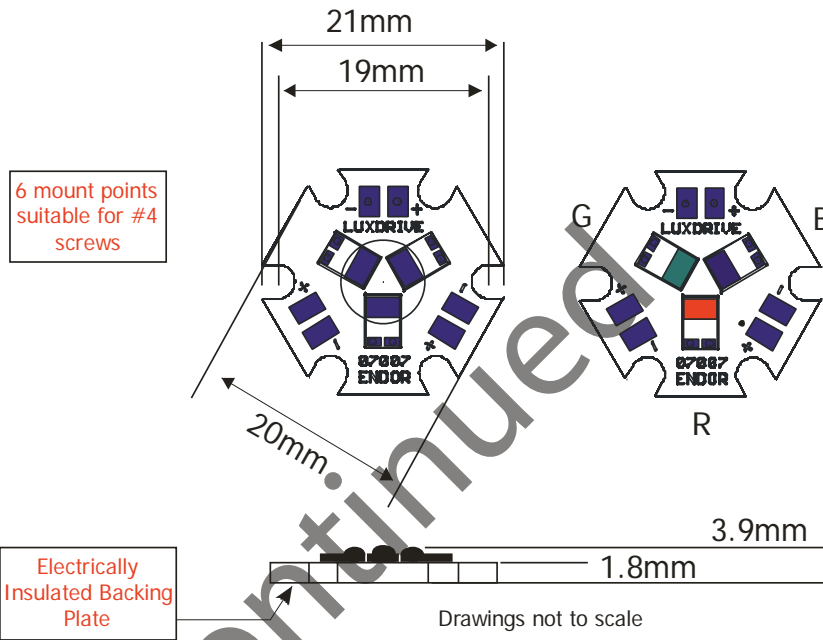
Heat Sinking and Mounting

The Endor StarTM has six mounting points for #4 screws. It should be attached to additional heat sinking for proper thermal management. At minimum, a heat sink of a metal plate (copper or aluminum), attached using a thermal interface material, should be used to increase the area exposed to free air. The Endor StarTM Metal Core Printed Circuit Board has a backing plate that is electrically isolated from the emitter. It is not necessary to use an electrically insulated thermal interface material.

Optics

The Endor StarTM can be fitted with an optic, offered by LUXdrive. There is one standard illumination pattern available: wide(25°). The part number is DB-OPML-3-025.

Physical Dimensions



Physical Attributes of 7007 Endor StarTM