

### Bergquist shortens the design cycle and speeds up your time to market.

### Thermal Clad substrates offer more flexibility in selecting LED components

Bergquist offers a family of standard thermally conductive insulated metal substrate (IMS) circuit boards specifically for LED applications which replace conventional FR-4 PCBs. Better thermal management allows more forward current to be applied to the LED, while still maintaining desired die temperatures, which means more light and possibly reducing the number of LEDs required to achieve the desired light output. With proper thermal management, Power LED lifetimes can be extended considerably.

Now you can get a jump-start on your design with one of these star or square substrates; available in single, strip or array configurations. Choose from 10 different LED footprints to give you the freedom to select the LED component's color, brightness and power that best fits your needs. Optimize the prototyping process with the lowest possible operating temperatures and the brightest light output for your next Power LED application. The most popular LED profiles on the world's most reliable IMS – matched for your design ease.

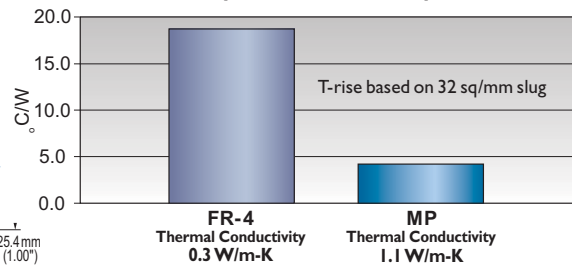
#### Standard Bergquist Thermal Clad® LED Configurations



#### Bergquist Thermal Clad® IMS Specs

Base Metal	1.57mm (0.062") Aluminum 5052
Thermally Conductive	.076mm (3 mil) MP
Dielectric	
Copper Circuit Foil	35µm (1oz.) copper circuit foil
Surface Finish	White solder mask, Pb-free HASL solder pads (RoHS compliant)

#### Thermal Impedance of FR4 compared to MP



#### Bergquist Thermal Clad® - Standard Power LED IMS Selection Guide

LED Footprint Type	Star Board (1-up) (A) Part No.	Star Array (36-up) (B) Part No.	Square Board (1-up) (C) Part No.	Square Strip (17-up) (D) Part No.
1 Osram Golden Dragon®	803128	803268	803118	803288
2 Lite-On® LOPL	803123	803263	803113	803283
3 Lumex SML-LX	803124	803264	803114	803284
4 Lumileds™ Luxeon® I, III and V	803125	803265	803115	803285
5 Lumileds™ Luxeon® K2	803126	803266	803116	803286
6 Lumileds™ Luxeon® Rebel	803127	803267	803117	803287
7 Cree® XLamp®	803122	803262	803112	803282
8 Seoul Semiconductor Z-Power	803129	803269	803119	803289
9 Nichia Power LED 3.5 x 3.5	803291	803292	803290	803293
10 Avago Moonstone™ Emitter	803121	803261	803111	803281

These products are available through your local distributor, please call or check our website for contact information.



[www.bergquistcompany.com](http://www.bergquistcompany.com)

The Bergquist Company  
North American Headquarters  
18930 West 78th Street  
Chanhassen, MN 55317  
Phone: 800-347-4572  
Fax: 952-835-4156

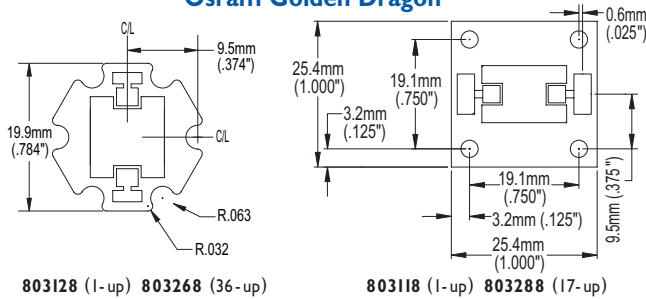
The Bergquist Company  
European Headquarters  
Bramenberg 9a, 3755 BT Eemnes  
Netherlands  
Phone: 31-35-5380684  
Fax: 31-35-5380295

The Bergquist Company  
Asian Headquarters  
Room 15, 8/F  
Wah Wai Industrial Centre No.38-40  
Au Pui Wan Street,  
Fotan, Shatin, N.T., Hong Kong  
Ph: 852-2690-9296  
Fax: 852-2690-2344

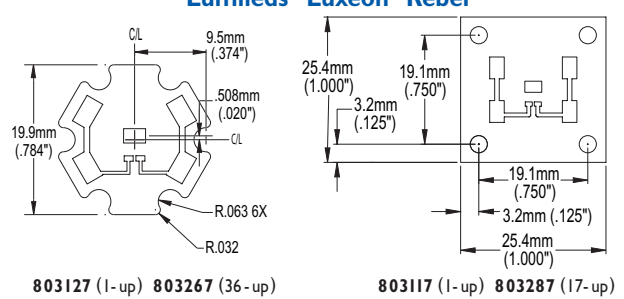
All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

WHP\_TClad\_LED\_31408\_v7

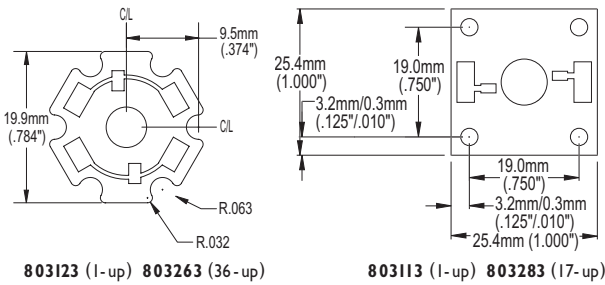
### Osram Golden Dragon®



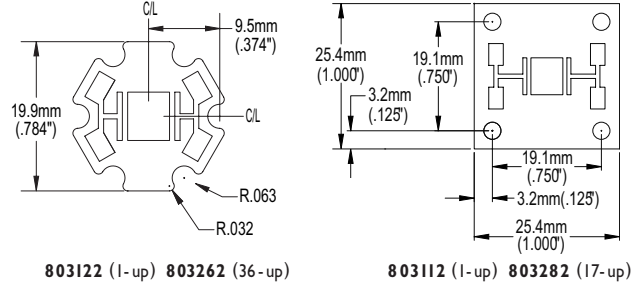
### Lumileds™ Luxeon® Rebel



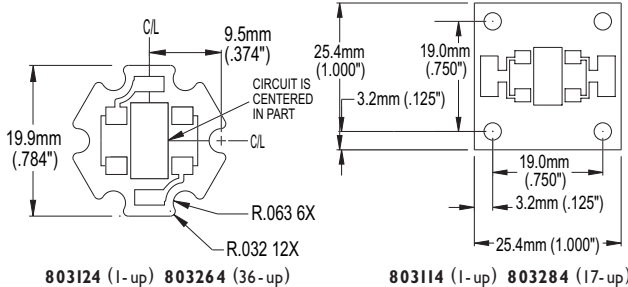
### Lite-On® LOPL



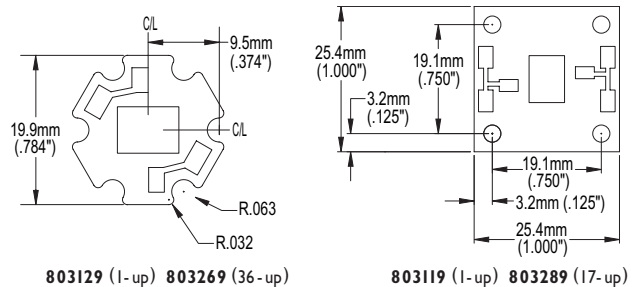
### Cree® XLamp®



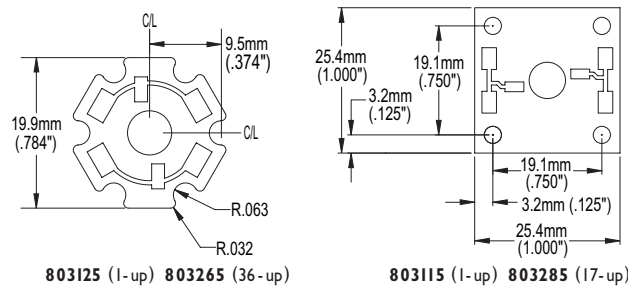
### Lumex SML-LX



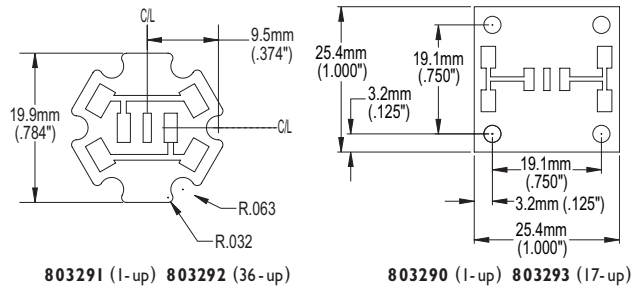
### Seoul Semiconductor Z-Power



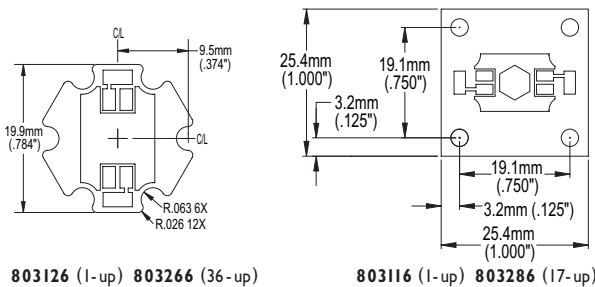
### Lumileds™ Luxeon® I, III and V



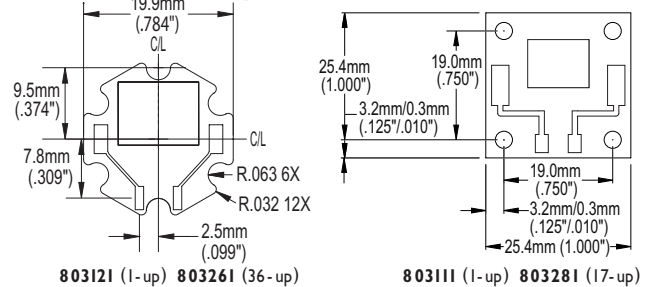
### Nichia Power LED 3.5 x 3.5



### Lumileds™ Luxeon® K2



### Avago Moonstone™ Emitter



These products are available through your local distributor, please call or check our website for contact information.

[www.bergquistcompany.com](http://www.bergquistcompany.com) | 1.800.347.4572



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.