



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# GW5BQC15L02

## ■ White LED (High Color Rendering)

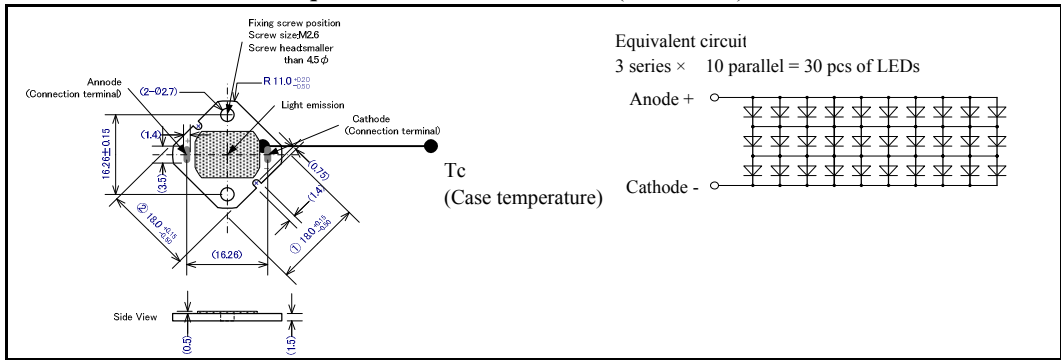
- High power consumption 3.6W & high CRI LED emitters for solid-state lighting application
- Blue LED die + Red and Green phosphor technique to achieve high CRI.
- Based on "ceramic substrate" to achieve high level reliability and heat release.

## ■ Feature

- (1) Outside dimension 18 x 18 x 1.5mm<sup>+1</sup> (Emitting part excluded)
- (2) 30 LED dice mounted per a substrate.
- (3) CRI Ra=85(Avg.), Color temperature 2,700K
- (4) Not required wiring on board. Possible to attach easily and directly to heat sink.
- (5) CCT and Ra characteristics are based on EnergyStar program.

## ■ External dimensions and equivalent circuit

( unit : mm )



## ■ Absolute maximum ratings (Reference value)

| Item                  | Symbol           | Rating       | Unit |
|-----------------------|------------------|--------------|------|
| Power Dissipation     | P                | 4.4          | W    |
| Forward Current       | I <sub>F</sub>   | 400          | mA   |
| Reverse Voltage       | V <sub>R</sub>   | 15           | V    |
| Operating Temperature | T <sub>opr</sub> | - 30 ~ + 90  | °C   |
| Storage Temperature   | T <sub>stg</sub> | - 40 ~ + 100 | °C   |

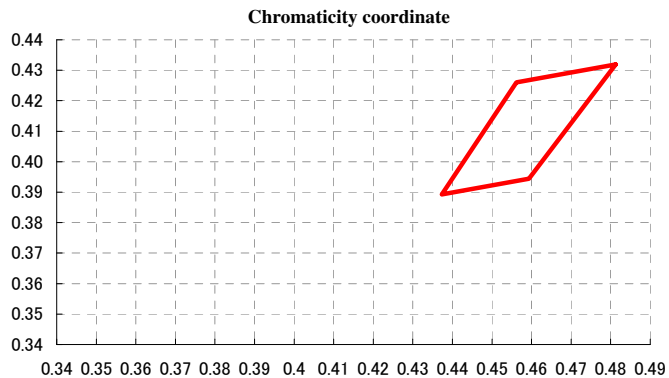
## ■ Electro-optical characteristics (Reference value) (T<sub>c</sub>=25°C)

| Item                     | Symbol         | Condition               | MIN.   | TYP.   | MAX.   | Unit |
|--------------------------|----------------|-------------------------|--------|--------|--------|------|
| Forward Voltage          | V <sub>F</sub> | I <sub>F</sub> = 360 mA | 8.5    | (10.2) | 11.5   | V    |
| Luminous Flux            | Φ              | I <sub>F</sub> = 360 mA | 105    | (160)  | -      | lm   |
| Chromaticity Coordinates | x              | I <sub>F</sub> = 360 mA | -      | 0.4578 | -      | -    |
|                          | y              |                         | -      | 0.4101 | -      | -    |
| Color Temperature        | -              | I <sub>F</sub> = 360 mA | (2580) | 2725   | (2870) | K    |
| CRI                      | Ra             | I <sub>F</sub> = 360 mA | -      | (85)   | -      | -    |

## ■ Chromaticity coordinate

| Rank |   | Chromaticity table |         |         |         |
|------|---|--------------------|---------|---------|---------|
|      |   | Point 1            | Point 2 | Point 3 | Point 4 |
| -    | x | 0.4813             | 0.4562  | 0.4373  | 0.4593  |
|      | y | 0.4319             | 0.4260  | 0.3893  | 0.3944  |

(I<sub>F</sub>=360mA T<sub>c</sub>=25°C)



This product is under development. Please confirm it with specifications when you adopt it.