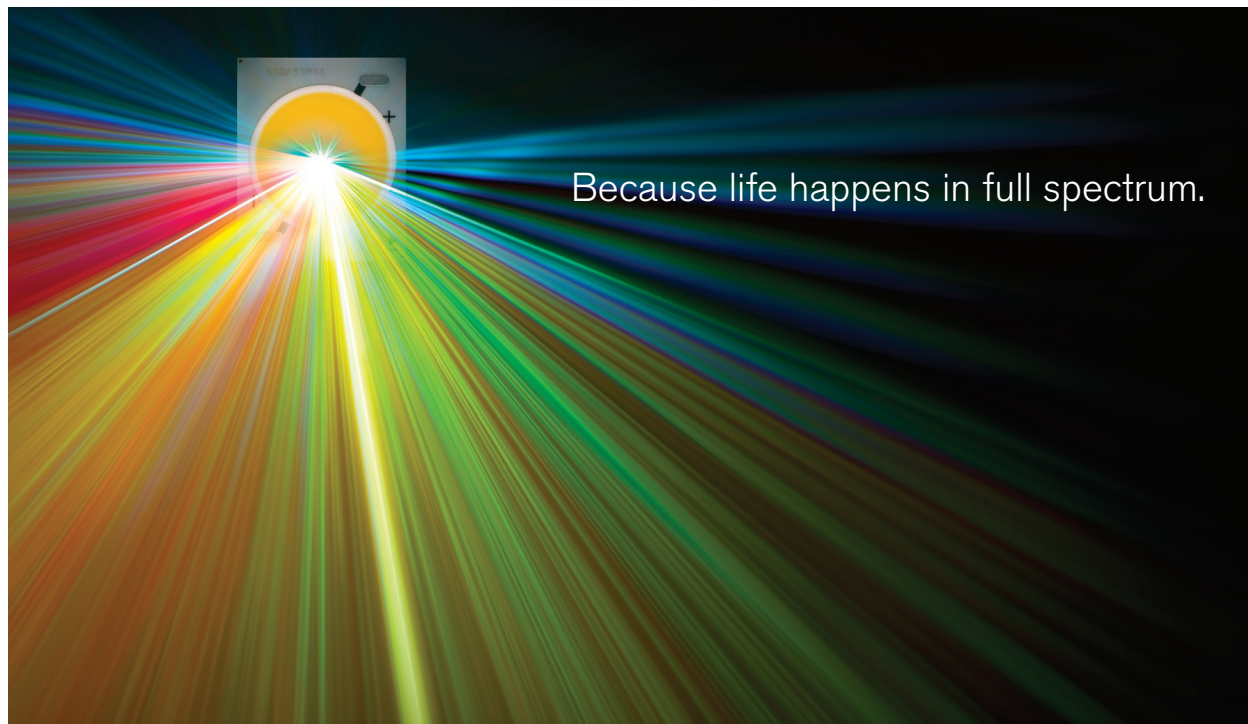




Because life happens in full spectrum.

**SHARP ZENIGATA CHIP ON BOARD**

**ZENIGATA** | LEDs BY SHARP



# Sensational Light, Simplified Design.

Sharp Zenigata Chip on Board technology leverages a uniform Light Emitting Surface (LES) to make optical design easier, improve light quality, and allow you to create more elegant products. A unique, fully insulating ceramic substrate provides optimal heat dissipation and low color shift, with even lumen output over time.

Now, choose from Sharp LEDs ranging from 0.2W – 80W, including Zenigata COB LEDs and Sharp's specialty Double Dome product line. New Mega Zenigata modules deliver up to a 400W equivalent of incandescent light. In addition to big energy savings, these powerful LEDs eliminate the sub-standard design aesthetic and uneven light quality that results from the use of multiple low-power LEDs in a luminaire.

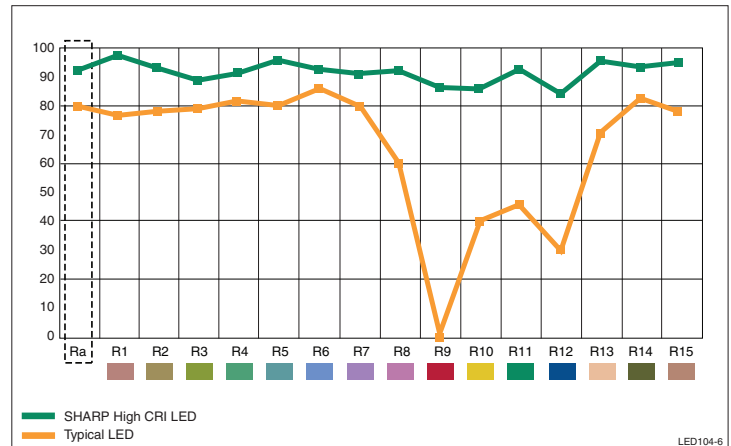
Zenigata LEDs deliver high efficacy (high performance modules exceed 100 lm/W) and typical\* hot lumen performance is greater than 90%. Each Zenigata product family features a uniform package size and a typical operating life exceeding 50,000 hours.

# The Color of Life

Life happens in full spectrum. Lighting products need to be more than just functional and reliable; they must also accurately illuminate the dazzling colors that shape our world, and make objects, people, and places look their absolute best.

Sharp LEDs bring you some of the richest, most true-to-life color rendering available. Products in our Mega Zenigata High CRI line boast color rendering up to 93 CRI, and all Sharp LEDs meet or exceed the ENERGY STAR® minimum requirement of 80 CRI. Still, we recognize that CRI measurement alone is not enough.

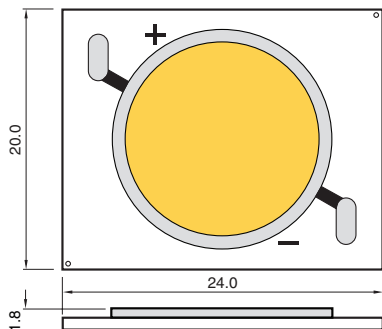
Sharp incorporates a blue LED die with a proprietary mixture of green and red phosphors to go beyond typical CRI measurements (R1 – R8) with powerful performance up to R15. This includes excellent R9 (deep red) rendering. Accurate, deep reds lend a warm, vibrant aesthetic that will help elevate your lighting products from “efficient” to “unforgettable.”



## The Mega Zenigata COB

The Mega Zenigata COB family provides a powerful, energy-saving LED alternative for incandescent, halogen, and compact fluorescent applications. Use just one LED in a fixture to save space and eliminate the uniformity issues of multiple emitters. Mega Zenigata LEDs deliver high efficacy (high performance modules exceed 100 lm/W) and typically restrict thermal sag to less than 10%.

Sharp's new 50W – 80W Mega Zenigata LEDs provide up to 400W of incandescent equivalent light, and expand the range of luminous flux to more than 6000 lm. The new LEDs maintain the line's compact package dimensions (20 mm × 24 mm) to eliminate unnecessary product redesign.



**NOTE:** Dimensions: mm  
Refer to Specifications for full dimensional information

## MEGA ZENIGATA

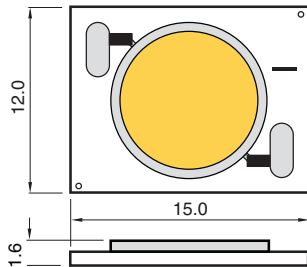
| Type                                                 | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous Flux (lm) | Efficacy (lm/W) |
|------------------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                                      | Min.   | Typ. |             |         |              |             |                    |                 |
| 50W - 80W<br>Normal CRI<br>R <sub>gc</sub> = 0.9 K/W | 80     | 82   | GW5DLE65MR5 | 6200    | 1500         | 53.25       | 6832               | 85.5            |
|                                                      |        |      |             |         | 950          | 50          | 4880               | 102.7           |
|                                                      |        |      | GW5DLE50MR5 | 4900    | 1500         | 53.25       | 6832               | 85.5            |
|                                                      |        |      |             |         | 950          | 50          | 4880               | 102.7           |
|                                                      |        |      | GW5DLE40MR5 | 4000    | 1500         | 53.25       | 6678               | 83.6            |
|                                                      |        |      |             |         | 950          | 50          | 4770               | 100.4           |
|                                                      |        | 83   | GW5DME35MR5 | 3500    | 1500         | 53.25       | 6412               | 80.3            |
|                                                      |        |      |             |         | 950          | 50          | 4580               | 96.4            |
|                                                      |        |      | GW5DME30MR5 | 3000    | 1500         | 53.25       | 6202               | 77.6            |
|                                                      |        |      |             |         | 950          | 50          | 4430               | 93.3            |
|                                                      |        | 82   | GW5DME27MR5 | 2700    | 1500         | 53.25       | 6020               | 75.4            |
|                                                      |        |      |             |         | 950          | 50          | 4300               | 90.5            |
| 50W - 80W<br>High CRI<br>R <sub>gc</sub> = 0.9 K/W   | 90     | 90   | GW5DGE65MR5 | 6200    | 1500         | 53.25       | 5460               | 68.4            |
|                                                      |        |      |             |         | 950          | 50          | 3900               | 82.1            |
|                                                      |        |      | GW5DGE50MR5 | 4900    | 1500         | 53.25       | 5460               | 68.4            |
|                                                      |        |      |             |         | 950          | 50          | 3900               | 82.1            |
|                                                      |        | 92   | GW5DGE40MR5 | 4000    | 1500         | 53.25       | 5390               | 67.5            |
|                                                      |        |      |             |         | 950          | 50          | 3850               | 81.1            |
|                                                      |        |      | GW5DGE35MR5 | 3500    | 1500         | 53.25       | 5236               | 65.6            |
|                                                      |        |      |             |         | 950          | 50          | 3740               | 78.7            |
|                                                      |        | 93   | GW5DGE30MR5 | 3000    | 1500         | 53.25       | 5138               | 64.3            |
|                                                      |        |      |             |         | 950          | 50          | 3670               | 77.3            |
|                                                      |        |      | GW5DGE27MR5 | 2700    | 1500         | 53.25       | 5026               | 62.9            |
|                                                      |        |      |             |         | 950          | 50          | 3590               | 75.6            |

| Type                                     | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous Flux (lm) | Efficacy (lm/W) |
|------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                          | Min.   | Typ. |             |         |              |             |                    |                 |
| 25W - 40W<br>Normal CRI<br>Rjc = 2.0 K/W | 80     | 82   | GW5DLC65M04 | 6500    | 1050         | 38.5        | 3640               | 90.0            |
|                                          |        |      |             |         | 700          | 37          | 2600               | 100.4           |
|                                          |        |      | GW5DLC50M04 | 5000    | 1050         | 38.5        | 3640               | 90.0            |
|                                          |        |      |             |         | 700          | 37          | 2600               | 100.4           |
|                                          |        |      | GW5DLC40M04 | 4000    | 1050         | 38.5        | 3570               | 88.3            |
|                                          |        |      |             |         | 700          | 37          | 2550               | 98.5            |
|                                          |        | 83   | GW5DMC35M04 | 3500    | 1050         | 38.5        | 3430               | 84.8            |
|                                          |        |      |             |         | 700          | 37          | 2450               | 94.6            |
|                                          |        |      | GW5DMC30M04 | 3000    | 1050         | 38.5        | 3318               | 82.1            |
|                                          |        |      |             |         | 700          | 37          | 2370               | 91.5            |
|                                          |        |      | GW5DMC27M04 | 2700    | 1050         | 38.5        | 3220               | 79.7            |
|                                          |        |      |             |         | 700          | 37          | 2300               | 88.8            |
| 25W - 40W<br>High CRI<br>Rjc = 2.0 K/W   | 90     | 90   | GW5DGC65M04 | 6500    | 1050         | 38.5        | 2912               | 72.0            |
|                                          |        |      |             |         | 700          | 37          | 2080               | 80.3            |
|                                          |        |      | GW5DGC50M04 | 5000    | 1050         | 38.5        | 2912               | 72.0            |
|                                          |        |      |             |         | 700          | 37          | 2080               | 80.3            |
|                                          |        | 92   | GW5DGC40M04 | 4000    | 1050         | 38.5        | 2870               | 71.0            |
|                                          |        |      |             |         | 700          | 37          | 2050               | 79.2            |
|                                          |        | 93   | GW5DGC35M04 | 3500    | 1050         | 38.5        | 2758               | 68.2            |
|                                          |        |      |             |         | 700          | 37          | 1970               | 76.1            |
|                                          |        |      | GW5DGC30M04 | 3000    | 1050         | 38.5        | 2730               | 67.5            |
|                                          |        |      |             |         | 700          | 37          | 1950               | 75.3            |
|                                          |        |      | GW5DGC27M04 | 2700    | 1050         | 38.5        | 2674               | 66.1            |
|                                          |        |      |             |         | 700          | 37          | 1910               | 73.7            |

| Type                                     | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous Flux (lm) | Efficacy (lm/W) |
|------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                          | Min.   | Typ. |             |         |              |             |                    |                 |
| 15W - 25W<br>Normal CRI<br>Rjc = 2.8 K/W | 80     | 82   | GW5DLA65M04 | 6500    | 700          | 39          | 2402               | 88.0            |
|                                          |        |      |             |         | 400          | 37          | 1550               | 104.7           |
|                                          |        |      | GW5DLA50M04 | 5000    | 700          | 39          | 2402               | 88.0            |
|                                          |        |      |             |         | 400          | 37          | 1550               | 104.7           |
|                                          |        |      | GW5DLA40M04 | 4000    | 700          | 39          | 2356               | 86.3            |
|                                          |        |      |             |         | 400          | 37          | 1520               | 102.7           |
|                                          |        | 83   | GW5DMA35M04 | 3500    | 700          | 39          | 2247               | 82.3            |
|                                          |        |      |             |         | 400          | 37          | 1450               | 98.0            |
|                                          |        |      | GW5DMA30M04 | 3000    | 700          | 39          | 2170               | 79.5            |
|                                          |        |      |             |         | 400          | 37          | 1400               | 94.6            |
|                                          |        |      | GW5DMA27M04 | 2700    | 700          | 39          | 2092               | 76.6            |
|                                          |        |      |             |         | 400          | 37          | 1350               | 91.2            |
| 15W - 25W<br>High CRI<br>Rjc = 2.8 K/W   | 90     | 90   | GW5DGA65M04 | 6500    | 700          | 39          | 1937               | 71.0            |
|                                          |        |      |             |         | 400          | 37          | 1250               | 84.5            |
|                                          |        |      | GW5DGA50M04 | 5000    | 700          | 39          | 1937               | 71.0            |
|                                          |        |      |             |         | 400          | 37          | 1250               | 84.5            |
|                                          |        | 92   | GW5DGA40M04 | 4000    | 700          | 39          | 1906               | 69.8            |
|                                          |        |      |             |         | 400          | 37          | 1230               | 83.1            |
|                                          |        | 93   | GW5DGA35M04 | 3500    | 700          | 39          | 1860               | 68.1            |
|                                          |        |      |             |         | 400          | 37          | 1200               | 81.1            |
|                                          |        |      | GW5DGA30M04 | 3000    | 700          | 39          | 1813               | 66.4            |
|                                          |        |      |             |         | 400          | 37          | 1170               | 79.1            |
|                                          |        |      | GW5DGA27M04 | 2700    | 700          | 39          | 1782               | 65.3            |
|                                          |        |      |             |         | 400          | 37          | 1150               | 77.7            |

## The Mini Zenigata COB

Our refreshed line of “2nd Generation” Mini Zenigata COB LEDs offers a luminous efficacy of up to 106 lm/W in standard operation, and a luminous flux between 300 and 1,672 lm. The new 15W module features a circular Light Emitting Surface (LES) of 8 mm to simplify lens and reflector design. All LEDs in the Mini Zenigata family provide a uniform package size of 15 × 12 × 1.6 mm.



**NOTE:** Dimensions: mm

*Refer to Specifications for full dimensional information*

## MINI ZENIGATA

| Type                                     | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                          | Min.   | Typ. |             |         |              |             |                    |                 |
| 10W - 15W<br>Normal CRI<br>Rjc = 2.5 K/W | 80     | 83   | GW5BMR50K05 | 5000    | 440          | 42.5        | 1672               | 89.4            |
|                                          |        |      |             |         | 400          | 39          | 1520               | 97.4            |
|                                          |        |      | GW5BMR40K05 | 4000    | 440          | 42.5        | 1672               | 89.4            |
|                                          |        |      |             |         | 400          | 39          | 1520               | 97.4            |
|                                          |        |      | GW5BMR30K05 | 3000    | 440          | 42.5        | 1540               | 82.4            |
|                                          |        |      |             |         | 400          | 39          | 1400               | 89.7            |
|                                          |        |      | GW5BMR27K05 | 2700    | 440          | 42.5        | 1485               | 79.4            |
|                                          |        |      |             |         | 400          | 39          | 1350               | 86.5            |
| 10W - 15W<br>High CRI<br>Rjc = 2.5 K/W   | 90     | 93   | GW5BGR50K05 | 5000    | 440          | 42.5        | 1375               | 73.5            |
|                                          |        |      |             |         | 400          | 39          | 1250               | 80.1            |
|                                          |        |      | GW5BGR40K05 | 4000    | 440          | 42.5        | 1353               | 72.4            |
|                                          |        |      |             |         | 400          | 39          | 1230               | 78.8            |
|                                          |        |      | GW5BGR30K05 | 3000    | 440          | 42.5        | 1287               | 68.8            |
|                                          |        |      |             |         | 400          | 39          | 1170               | 75.0            |
|                                          |        |      | GW5BGR27K05 | 2700    | 440          | 42.5        | 1265               | 67.6            |
|                                          |        |      |             |         | 400          | 39          | 1150               | 73.7            |

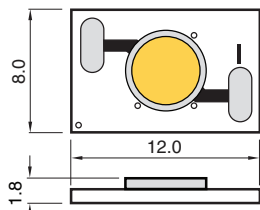
| Type                                    | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|-----------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                         | Min.   | Typ. |             |         |              |             |                    |                 |
| 10W - 15W<br>Normal CRI<br>Rjc = 5 K/W  | 80     | 82   | GW5BMJ65K04 | 6500    | 800          | 18.7        | 1368               | 91.4            |
|                                         |        |      |             |         | 480          | 17.7        | 900                | 105.9           |
|                                         |        |      | GW5BMJ50K04 | 5000    | 800          | 18.7        | 1368               | 91.4            |
|                                         |        |      |             |         | 480          | 17.7        | 900                | 105.9           |
|                                         |        |      | GW5BMJ40K04 | 4000    | 800          | 18.7        | 1338               | 89.4            |
|                                         |        |      |             |         | 480          | 17.7        | 880                | 103.6           |
|                                         |        |      | GW5BMJ35K04 | 3500    | 800          | 18.7        | 1307               | 87.4            |
|                                         |        |      |             |         | 480          | 17.7        | 860                | 101.2           |
|                                         |        |      | GW5BMJ30K04 | 3000    | 800          | 18.7        | 1277               | 85.3            |
|                                         |        |      |             |         | 480          | 17.7        | 840                | 98.9            |
|                                         |        |      | GW5BMJ27K04 | 2700    | 800          | 18.7        | 1216               | 81.3            |
|                                         |        |      |             |         | 480          | 17.7        | 800                | 94.2            |
| 7W - 10W<br>Normal CRI<br>Rjc = 7.6 K/W | 80     | 82   | GW5BMF65K04 | 6500    | 680          | 12.5        | 744                | 87.5            |
|                                         |        |      |             |         | 520          | 12.3        | 620                | 96.9            |
|                                         |        |      | GW5BMF50K04 | 5000    | 680          | 12.5        | 744                | 87.5            |
|                                         |        |      |             |         | 520          | 12.3        | 620                | 96.9            |
|                                         |        |      | GW5BMF40K04 | 4000    | 680          | 12.5        | 720                | 84.7            |
|                                         |        |      |             |         | 520          | 12.3        | 600                | 93.8            |
|                                         |        |      | GW5BMF35K04 | 3500    | 680          | 12.5        | 696                | 81.9            |
|                                         |        |      |             |         | 520          | 12.3        | 580                | 90.7            |
|                                         |        |      | GW5BMF30K04 | 3000    | 680          | 12.5        | 672                | 79.1            |
|                                         |        |      |             |         | 520          | 12.3        | 560                | 87.6            |
|                                         |        |      | GW5BMF27K04 | 2700    | 680          | 12.5        | 636                | 74.8            |
|                                         |        |      |             |         | 520          | 12.3        | 530                | 82.9            |

| Type                                               | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|----------------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                                    | Min.   | Typ. |             |         |              |             |                    |                 |
| 4W - 5W<br>Normal CRI<br>R <sub>jc</sub> = 7.6 K/W | 80     | 82   | GW5BMC65KG4 | 6500    | 500          | 9.4         | 414                | 88.1            |
|                                                    |        |      |             |         | 400          | 9.2         | 360                | 97.8            |
|                                                    |        |      | GW5BMC50KG4 | 5000    | 500          | 9.4         | 414                | 88.1            |
|                                                    |        |      |             |         | 400          | 9.2         | 360                | 97.8            |
|                                                    |        |      | GW5BMC40KG4 | 4000    | 500          | 9.4         | 403                | 85.6            |
|                                                    |        |      |             |         | 400          | 9.2         | 350                | 95.1            |
|                                                    |        |      | GW5BMC35KG4 | 3500    | 500          | 9.4         | 391                | 83.2            |
|                                                    |        |      |             |         | 400          | 9.2         | 340                | 92.4            |
|                                                    |        |      | GW5BMC30KG4 | 3000    | 500          | 9.4         | 380                | 80.7            |
|                                                    |        |      |             |         | 400          | 9.2         | 330                | 89.7            |
|                                                    |        |      | GW5BMC27KG4 | 2700    | 500          | 9.4         | 357                | 75.9            |
|                                                    |        |      |             |         | 400          | 9.2         | 310                | 84.2            |

## The Petite Zenigata COB

Sharp now introduces a new class of COB LEDs, the Petite Zenigata, ranging from 4W – 6W. Normal CRI products deliver between 390 – 550 lumens. Products in the High CRI line deliver between 300 – 395 lumens. They are perfectly suited for applications requiring compact lenses, such as small spot or track lighting fixtures.

The 9.6V product allows a simple “buck” DC-DC converter to be used for MR16 lamps (which normally require 12V), while a higher-voltage 40V part provides a “next generation” alternative to traditional line voltage in GU10 lamps. Petite Zenigata LEDs have a compact package size of 8 mm × 12 mm and a circular Light Emitting Surface (LES) of just 4 mm.



**NOTE:** Dimensions: mm

*Refer to Specifications for full dimensional information*

## PETITE ZENIGATA

| Type                                            | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|-------------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                                 | Min.   | Typ. |             |         |              |             |                    |                 |
| SMQ<br>6W Class<br>Normal CRI<br>Rjc = 11.5 K/W | 80     | 82   | GW5SMQ50P05 | 4850    | 160          | 40.9        | 495                | 75.6            |
|                                                 |        |      |             |         | 140          | 40          | 450                | 80.4            |
|                                                 |        |      | GW5SMQ40P05 | 3950    | 160          | 40.9        | 495                | 75.6            |
|                                                 |        |      |             |         | 140          | 40          | 450                | 80.4            |
|                                                 |        |      | GW5SMQ35P05 | 3400    | 160          | 40.9        | 462                | 70.6            |
|                                                 |        |      |             |         | 140          | 40          | 420                | 75.0            |
|                                                 |        |      | GW5SMQ30P05 | 3000    | 160          | 40.9        | 462                | 70.6            |
|                                                 |        |      |             |         | 140          | 40          | 420                | 75.0            |
|                                                 |        |      | GW5SMQ27P05 | 2730    | 160          | 40.9        | 429                | 65.6            |
|                                                 |        |      |             |         | 140          | 40          | 390                | 69.6            |
| SMD<br>5W Class<br>Normal CRI<br>Rjc = 11.5 K/W | 80     | 82   | GW5SMD50P05 | 4850    | 560          | 9.75        | 469                | 85.8            |
|                                                 |        |      |             |         | 500          | 9.6         | 430                | 89.6            |
|                                                 |        |      | GW5SMD40P05 | 3950    | 560          | 9.75        | 469                | 85.8            |
|                                                 |        |      |             |         | 500          | 9.6         | 430                | 89.6            |
|                                                 |        |      | GW5SMD35P05 | 3400    | 560          | 9.75        | 436                | 79.9            |
|                                                 |        |      |             |         | 500          | 9.6         | 400                | 83.3            |
|                                                 |        |      | GW5SMD30P05 | 3000    | 560          | 9.75        | 436                | 79.9            |
|                                                 |        |      |             |         | 500          | 9.6         | 400                | 83.3            |
|                                                 |        |      | GW5SMD27P05 | 2730    | 560          | 9.75        | 403                | 73.9            |
|                                                 |        |      |             |         | 500          | 9.6         | 370                | 77.1            |

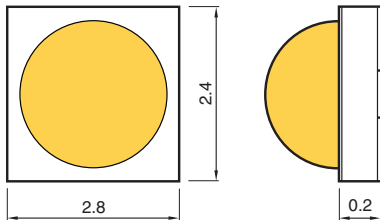
| Type                                          | CRI Ra |      | Part No.     | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|-----------------------------------------------|--------|------|--------------|---------|--------------|-------------|--------------------|-----------------|
|                                               | Min.   | Typ. |              |         |              |             |                    |                 |
| SGD<br>5W Class<br>High CRI<br>Rjc = 11.5 K/W | 90     | 92   | GW5SGD50P05  | 4850    | 560          | 9.75        | 391                | 71.5            |
|                                               |        |      |              |         | 500          | 9.6         | 360                | 75.0            |
|                                               |        |      | GW5SGD40P05  | 3950    | 560          | 9.75        | 391                | 71.5            |
|                                               |        |      |              |         | 500          | 9.6         | 360                | 75.0            |
|                                               |        |      | GW5SGD35P05  | 3400    | 560          | 9.75        | 358                | 65.6            |
|                                               |        |      |              |         | 500          | 9.6         | 330                | 68.8            |
|                                               |        |      | GW5SGD30P05  | 3000    | 560          | 9.75        | 358                | 65.6            |
|                                               |        |      |              |         | 500          | 9.6         | 330                | 68.8            |
|                                               |        |      | GW5SGD27P05  | 2730    | 560          | 9.75        | 326                | 59.6            |
|                                               |        |      |              |         | 500          | 9.6         | 300                | 62.5            |
| SMC<br>4W Class<br>Normal CRI<br>Rjc = 16 K/W | 80     | 82   | GW5SMC500P05 | 4850    | 460          | 9.95        | 352                | 76.9            |
|                                               |        |      |              |         | 400          | 9.8         | 320                | 81.6            |
|                                               |        |      | GW5SMC40P05  | 3950    | 460          | 9.95        | 352                | 76.9            |
|                                               |        |      |              |         | 400          | 9.8         | 320                | 81.6            |
|                                               |        |      | GW5SMC35P05  | 3400    | 460          | 9.95        | 330                | 72.1            |
|                                               |        |      |              |         | 400          | 9.8         | 300                | 76.5            |
|                                               |        |      | GW5SMC30P05  | 3000    | 460          | 9.95        | 330                | 72.1            |
|                                               |        |      |              |         | 400          | 9.8         | 300                | 76.5            |
|                                               |        |      | GW5SMC27P05  | 2730    | 480          | 9.95        | 308                | 64.5            |
|                                               |        |      |              |         | 400          | 9.8         | 280                | 71.4            |

## The Double Dome

Sharp's specialty Double Dome LED family provides a high-intensity white LED option for area and strip lighting solutions where linear lighting is desired. Its moderate light output cuts down on potential glare compared to higher-wattage LEDs. A small (2.8 mm × 2.8 mm × 1.9 mm) surface-mountable footprint provides ease of installation.

Sharp's new one die Double Dome is ideal for applications requiring more moderate light output for even greater glare avoidance. It also offers a unique, energy-saving option for fixtures that place a series of LEDs in a line (i.e., LED "tube-style" lighting).

The 0.3W – 0.5W Double Dome products integrate two LED die in each package, and are designed for intermediate applications that require an elegant lighting solution. The 0.8W Double Dome integrates three LED die to achieve higher lumen output for maximum brightness.



**NOTE:** Dimensions: mm  
*Refer to Specifications for full dimensional information*

## DOUBLE DOME

| Type                                                     | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|----------------------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                                          | Min.   | Typ. |             |         |              |             |                    |                 |
| Double Dome<br>0.5W (3 dice)<br>R <sub>jc</sub> = 25 K/W | 80     | 83   | GM2BB65QK0C | 6500    | 220          | 3.07        | 68.5               | 101             |
|                                                          |        |      |             |         | 150          | 2.95        | 50                 | 113             |
|                                                          |        |      | GM2BB57QK0C | 5700    | 220          | 3.07        | 71                 | 105             |
|                                                          |        |      |             |         | 150          | 2.95        | 52                 | 118             |
|                                                          |        |      | GM2BB50QK0C | 5000    | 220          | 3.07        | 72.5               | 107             |
|                                                          |        |      |             |         | 150          | 2.95        | 53                 | 120             |
|                                                          |        |      | GM2BB45QK0C | 4500    | 220          | 3.07        | 70                 | 104             |
|                                                          |        |      |             |         | 150          | 2.95        | 51                 | 115             |
|                                                          |        |      | GM2BB40QK0C | 4000    | 220          | 3.07        | 68.5               | 101             |
|                                                          |        |      |             |         | 150          | 2.95        | 50                 | 113             |
|                                                          |        |      | GM2BB35QK0C | 3500    | 220          | 3.07        | 66                 | 98              |
|                                                          |        |      |             |         | 150          | 2.95        | 48                 | 108             |
|                                                          |        |      | GM2BB30QK0C | 3000    | 220          | 3.07        | 63                 | 93              |
|                                                          |        |      |             |         | 150          | 2.95        | 46                 | 104             |
|                                                          |        |      | GM2BB27QK0C | 2700    | 220          | 3.07        | 60.5               | 90              |
|                                                          |        |      |             |         | 150          | 2.95        | 44                 | 99              |

| Type                                                     | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|----------------------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                                          | Min.   | Typ. |             |         |              |             |                    |                 |
| Double Dome<br>0.3W (2 dice)<br>R <sub>jc</sub> = 33 K/W | 80     | 83   | GM2BB65QKAC | 6500    | 160          | 3.07        | 50.3               | 102             |
|                                                          |        |      |             |         | 100          | 2.95        | 33.5               | 114             |
|                                                          |        |      |             |         | 80           | 2.90        | 27.5               | 119             |
|                                                          |        |      | GM2BB57QKAC | 5700    | 160          | 3.07        | 52.5               | 107             |
|                                                          |        |      |             |         | 100          | 2.95        | 35.0               | 119             |
|                                                          |        |      |             |         | 80           | 2.90        | 29.0               | 125             |
|                                                          |        |      | GM2BB50QKAC | 5000    | 160          | 3.07        | 53.3               | 108             |
|                                                          |        |      |             |         | 100          | 2.95        | 35.5               | 120             |
|                                                          |        |      |             |         | 80           | 2.90        | 29.5               | 127             |
|                                                          |        |      | GM2BB45QKAC | 4500    | 160          | 3.07        | 51.8               | 105             |
|                                                          |        |      |             |         | 100          | 2.95        | 34.5               | 117             |
|                                                          |        |      |             |         | 80           | 2.90        | 28.5               | 123             |
|                                                          |        |      | GM2BB40QKAC | 4000    | 160          | 3.07        | 50.3               | 102             |
|                                                          |        |      |             |         | 100          | 2.95        | 33.5               | 114             |
|                                                          |        |      |             |         | 80           | 2.90        | 27.5               | 119             |
|                                                          |        |      | GM2BB35QKAC | 3500    | 160          | 3.07        | 48.8               | 99              |
|                                                          |        |      |             |         | 100          | 2.95        | 32.5               | 110             |
|                                                          |        |      |             |         | 80           | 2.90        | 27.0               | 116             |
|                                                          |        |      | GM2BB30QKAC | 3000    | 160          | 3.07        | 46.5               | 95              |
|                                                          |        |      |             |         | 100          | 2.95        | 31.0               | 105             |
|                                                          |        |      |             |         | 80           | 2.90        | 25.5               | 110             |
|                                                          |        |      | GM2BB27QKAC | 2700    | 160          | 3.07        | 44.3               | 90              |
|                                                          |        |      |             |         | 100          | 2.95        | 29.5               | 100             |
|                                                          |        |      |             |         | 80           | 2.90        | 24.5               | 106             |

| Type                                        | CRI Ra |      | Part No.    | CCT (K) | Current (mA) | Voltage (V) | Luminous flux (lm) | Efficacy (lm/W) |
|---------------------------------------------|--------|------|-------------|---------|--------------|-------------|--------------------|-----------------|
|                                             | Min.   | Typ. |             |         |              |             |                    |                 |
| Double Dome<br>0.2W (1 die)<br>Rjc = 65 K/W | 80     | 83   | GM2BB65QK1C | 6500    | 100          | 3.10        | 31.5               | 102             |
|                                             |        |      |             |         | 70           | 3.04        | 23.1               | 109             |
|                                             |        |      |             |         | 50           | 2.95        | 17.5               | 119             |
|                                             |        |      | GM2BB57QK1C | 5700    | 100          | 3.10        | 33.3               | 107             |
|                                             |        |      |             |         | 70           | 3.04        | 24.5               | 115             |
|                                             |        |      |             |         | 50           | 2.95        | 18.5               | 125             |
|                                             |        |      | GM2BB50QK1C | 5000    | 100          | 3.10        | 33.3               | 107             |
|                                             |        |      |             |         | 70           | 3.04        | 24.5               | 115             |
|                                             |        |      |             |         | 50           | 2.95        | 18.5               | 125             |
|                                             |        |      | GM2BB45QK1C | 4500    | 100          | 3.10        | 32.0               | 103             |
|                                             |        |      |             |         | 70           | 3.04        | 23.5               | 110             |
|                                             |        |      |             |         | 50           | 2.95        | 17.8               | 121             |
|                                             |        |      | GM2BB40QK1C | 4000    | 100          | 3.10        | 31.5               | 102             |
|                                             |        |      |             |         | 70           | 3.04        | 23.1               | 109             |
|                                             |        |      |             |         | 50           | 2.95        | 17.5               | 119             |
|                                             |        |      | GM2BB35QK1C | 3500    | 100          | 3.10        | 30.2               | 98              |
|                                             |        |      |             |         | 70           | 3.04        | 22.2               | 104             |
|                                             |        |      |             |         | 50           | 2.95        | 16.8               | 114             |
|                                             |        |      | GM2BB30QK1C | 3000    | 100          | 3.10        | 29.0               | 93              |
|                                             |        |      |             |         | 70           | 3.04        | 21.3               | 100             |
|                                             |        |      |             |         | 50           | 2.95        | 16.1               | 109             |
|                                             |        |      | GM2BB27QK1C | 2700    | 100          | 3.10        | 27.7               | 89              |
|                                             |        |      |             |         | 70           | 3.04        | 20.4               | 96              |
|                                             |        |      |             |         | 50           | 2.95        | 15.4               | 104             |



## Support

Sharp makes 40 years of LED know-how available to you when you need it most. Our domestic support footprint is filled with experts located in your region who can help save you valuable time in the lab and get to market more quickly.

**Have questions? Sharp answers.**

## Learn More

Contact your local Sharp representative or Distributor for more information or product samples – or visit **[www.SharpLEDs.com](http://www.SharpLEDs.com)**. Our Resources page will lead you to White Papers, Application Notes, Podcasts, Product Specifications, and information about third party support for reflectors, lenses, and holders.

# A Brighter Environmental Outlook

The benefits of LED lighting not only brighten your design; they brighten our world. LEDs are free of hazardous substances such as mercury (Hg). They convert energy to visible light much more efficiently than traditional lighting sources. Plus, an increased operating life (Sharp's modules typically exceed 50k hours of operation, versus a typical 10k hours for a compact fluorescent or 2k hours for an incandescent bulb) means a significantly longer time before LEDs require replacement with new modules.



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