

Technical Datasheet LS10  
(All patents pending)

*10W High Power Solid-State LED Light Source*

# LUSTRON X

## Introduction

For a brighter solid-state light source, **LUSTRON X** is an energy-efficient building block generating enough light outputs suitable for most applications in lighting field. **LUSTRON X** offers the best solid-state light source and you might realize your modern ideas of lightings.

**LUSTRON X** provide the best possible color rendering capability and color temperature. With a nominal correlated color temperature of 2800~3200K, similar to conventional indoor light source, **LUSTRON X** is particularly designed for architects and commercial lighting designers.

**LUSTRON X**

---

# LUSTROUS®

GREEN TECHNOLOGY OF LIGHTINGS

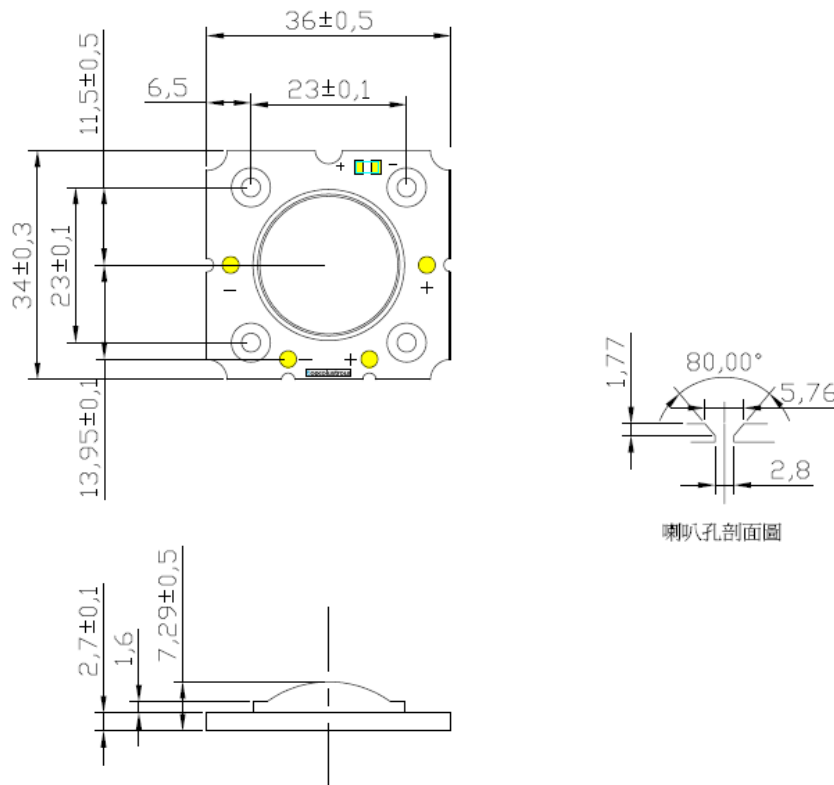
## LUSTRON X Part Number Matrix

Table.1

| Color              |          |
|--------------------|----------|
| Warm White (3200K) | NHA110CL |
| White (6500K)      | NHA110NW |

### Mechanical Dimensions

#### LUSTRON X



Note:

1. Drawing not to scale. All dimensions are in millimeters.

## LUSTRON X

# LUSTROUS®

GREEN TECHNOLOGY OF LIGHTINGS

## Flux Characteristics at 350 mA, Junction Temperature Tj = 25°C

Table.2

| Color              | Minimum Luminous Flux (lm) or Typical Luminous Flux (lm) or Radiometric Power (mW) |                        |
|--------------------|--|------------------------|
|                    | Radiometric Power (mW)   | Radiometric Power (mW) |
| White (6500K)      | 650 lm   | 750 m                  |
| Warm White (3200K) | 600 lm   | 690 lm                 |

1. The value in white type is predicted.
2. Brightness is measured in total power with tolerable errors of 10%. Minimum luminous flux performance guaranteed within published operating conditions.
3. Higher luminous flux will become available in the near future.

## Optical Characteristics

Table.3

| Color              | Dominant Wavelength (nm ) or Color Temperature(K) |       |       | Spectral Half-Width (nm) | Viewing Angle (degrees) |
|--------------------|---|-------|-------|--------------------------|-------------------------|
|                    | Min   | Typ   | Max   |                          |                         |
|                    | White (6500K)                                     | 4500K | 6500K | 8000K                    | NA                      |
| Warm White (3200K) | 2700K   | 3200K | 3600K | NA                       | 100                     |

1. Color Rendering Index (CRI) for our white product is higher than those made with Yag or Tag phosphor. Nitride phosphor consists of green and red spectrum which enhances CRI.

# LUSTRON X

## Electrical Characteristics

Table.4

| Color              | Forwad Voltage (V) for 350 mA<br>forward current |      |      |
|--------------------|--|------|------|
|                    | Min  | Typ  | Max  |
|                    | White (6500K)                                    | 29.2 | 31.5 |
| Warm White (3200K) | 29.2   | 31.5 | 33.8 |

1. Lustrous Technology allows a tolerance of each LED for voltage measurements.
2. Measurements are taken under each nominal forward current.

## Absolute Maximum Ratings

Table.5

| Parameters                               | For 350mA forward current                   |
|--|---|
|  | White/Warm White                            |
| DC Forward Current (mA)                  | 350   |
| Peak Pulsed Forward Current (mA)         | 500   |
| LED Junction Temperature ( $^{\circ}C$ ) | < 120                                       |
| ESD Sensitivity                          | +/-16000 HBV                                |
| Operating Temperature ( $^{\circ}C$ )    | -40 ~ +100                                  |
| Storage Temperature ( $^{\circ}C$ )      | -40 ~ +100                                  |
| Soldering Temperature ( $^{\circ}C$ )    | 260 (duration should be less than 5seconds) |

1. Proper current derating must be observed to maintain junction temperature below the maximum