

Technical Datasheet LS06 (All patents pending)

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 Part Number Matrix**

Table.1 (For 350mA, 31.5V)

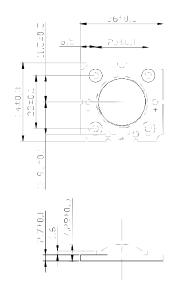
Color	P/N
Warm White (3200K)	LHS110CLC0B
White (6500K)	LHS110NWC0B
Neutral White(4100K)	LHS110MWC0B

Table.2 (For 1000mA, 10.5V)

Color	P/N
Warm White (3200K)	LAS110CLC0B
White (6500K)	LAS110NWC0B
Neutral White(4100K)	LAS110MWC0B

## **Mechanical Dimensions**

#### **LUSTRON X**





#### Note:

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



## **Stress Testing Item**

Stress Test	Stress Condition	Stress	Failure	Result
		Duration	Criteria	(failed/tested)
HTOL	Ta=85°C	Time=1000hrs	Note1	0/20
	$Tj < =125^{\circ}C$ , $If = 500mA( or If = 1.5A*)$			
LTOL	Ta=-30°C	Time=1000hrs	Note1	0/20
	$Tj < =125^{\circ}C$ , If=500mA( or If = 1.5A*)			
RTOL	Ta=25°C	Time=1000hrs	Note3	0/20
	$Tj < =125^{\circ}C$ , If=500mA( or If = 1.5A*)			
WHTOL	Ta=60°C	Time=500hrs	Note1	0/20
	$Tj < =125^{\circ}C$ , $If = 300mA( or If = 0.9A*)$			
	Humidity=90% RH			
HTSL	Ta=125°C, No operation	Time=1000hrs	Note1	0/20
LTSL	Ta=-40°C, No operation	Time=1000hrs	Note1	0/20
TMCL	-25°C to 125°C	500 cycle	Note1	0/20
	15 mins dwell time, 15 mins transfer			
	time			
TMSK	-40°C to 100°C	500 cycle	Note1	0/20
	15 minute dwell time, < 20 second			
	transfer time			
Mechanical	1500 G, 0.5 ms pulse width		Note2	0/20
Shock	5 shocks each, 6 axis			
Salt Atmosphere	Temp = 35°C	Time=48 hrs	Note2	0/20
	Salt deposit 30 g/sq.m/da			
Solderability	Pb-Free reflow solder profile, or T=260		Note3	0/20
	°C,10secs, 3 times			

Note1: A failure is an LED that is open, shorted, or loses more than 50% of its initial



light output.

Note2: A failure is an LED that is open or shorted.

Note3: A failure is an LED that is open, shorted, or loses more than 15% of its initial light output.

## Flux Characteristics at Junction Temperature Tj = $25^{\circ}C$

Table.3 (For 350mA, 31.5V)

0.1	Minimum Luminous Flux (lm) or Typical Luminous Flux (lm) or		
Color	Radiometric Power (mW)	Radiometric Power (mW)	
White (6500K)	650 lm	750 lm	
Warm White (3200K)	550 lm	600 lm	
Neutral White (4100K)	550 lm	600 lm	

Table.4 (For 1000mA, 10.5V)

Colon	Minimum Luminous Flux (lm) or Typical Luminous Flux (lm) or		
Color	Radiometric Power (mW)	Radiometric Power (mW)	
White (6500K)	650 lm	750 lm	
Warm White (3200K)	550 lm	600 lm	
Neutral White (4100K)	550 lm	600 lm	

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

<sup>\*:</sup> This value is for LAS110XXC0B.