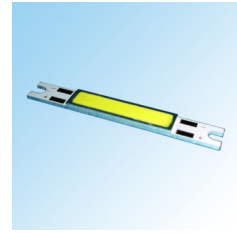




ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

HL-LB001D20W-3B3C3 White



Features

- Dimension: 50mm×7mm×1.8mm
- Single color.
- Emitting Color: White
- Easy installation with screws.
- Package: 100pcs/white box.
- High efficiency.
- Low power consumption.
- Long operating lifespan.
- High heat dissipation efficiency.
- RoHS compliant.

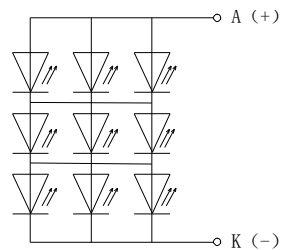
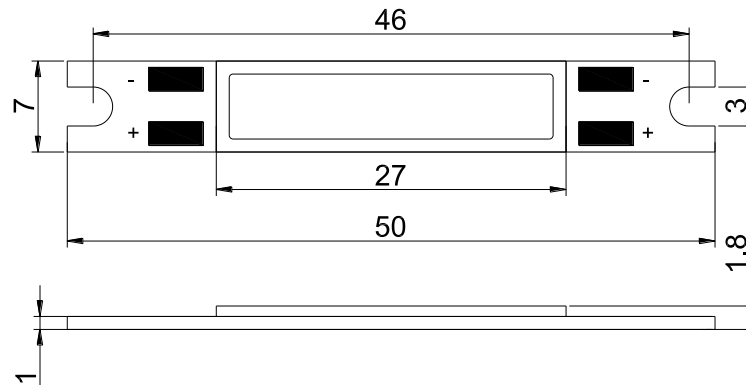
Description

The White source color devices are made with GaN on sapphire White Light Emitting Diode.

Applications

- Reading Lamp.
- Street Lamp.
- LED Backlight.
- Energy Saving Lamp.
- Decorative and Entertainment Lighting.
- Indoor and Outdoor Commercial Lighting.

Package Dimensions



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2 mm unless otherwise noted.

HL-LB001D20W-3B3C3 White

Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitting Color	
HL-LB001D20W-3B3C3	GaN	White	

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Typ.	Max.	Units	Test Conditions
VF	Forward Voltage (1)	White	8	9	—	V	I _F =300mA
2θ1/2	Viewing Angle(2)	White	—	120	—	deg	I _F =300mA
Φ _v	Luminous Flux(3)	White	180	210		lm	I _F =300mA
TC	Color Temperature(4)	White	6020		7040	k	I _F =300mA
IR	Reverse Current	White	—		10	uA	V _R = 5V

Note:

- 1.Forward Voltage is measured with an accuracy of ± 0.1v.
- 2.θ1/2 is the angle from optical centerline where the luminous flux is 1/2 the optical centerline value.
- 3.luminous intensity is measured with the accuracy of ±10%.
- 4.Color temperature measured with the accuracy ±200K.

Absolute Maximum Ratings at TA=25°C

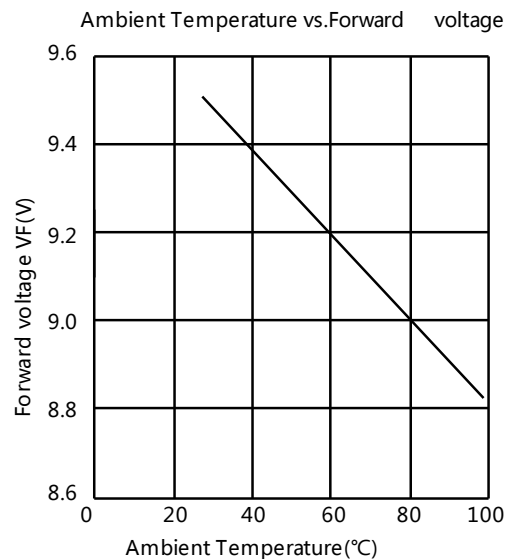
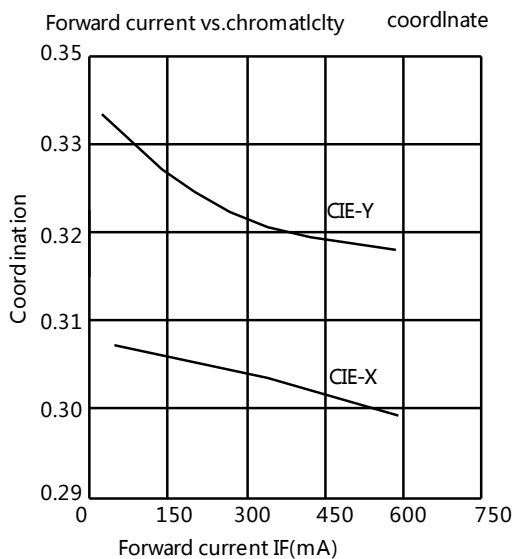
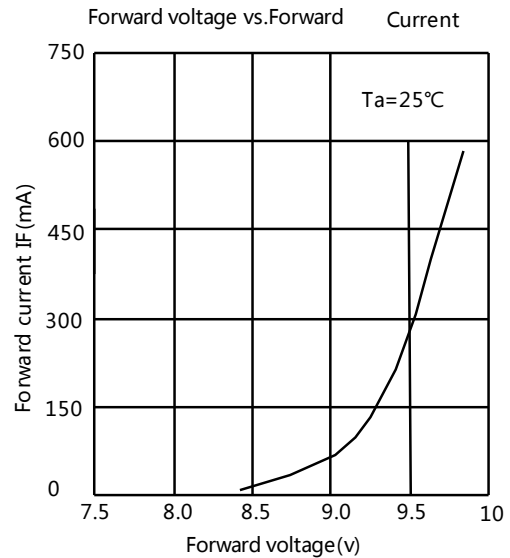
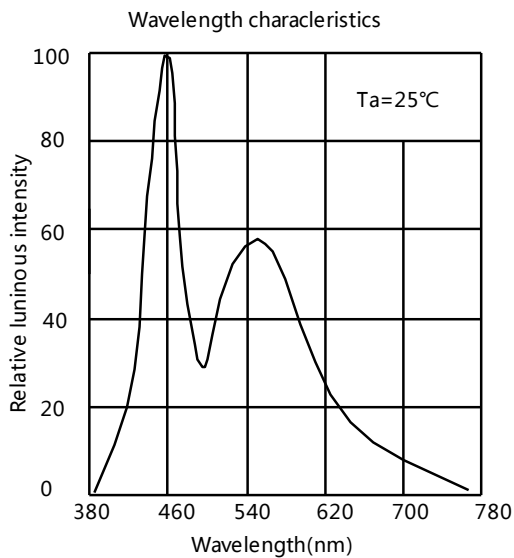
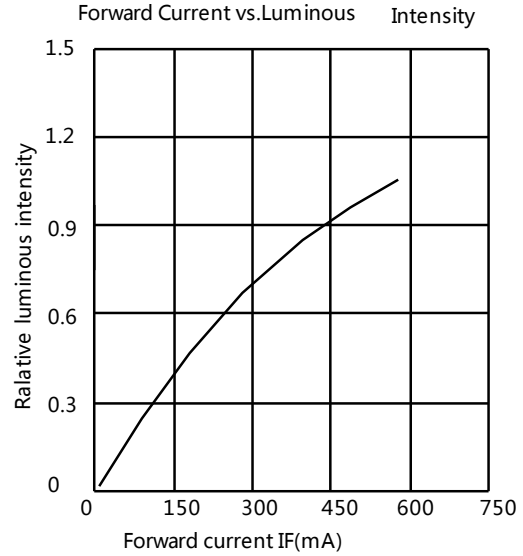
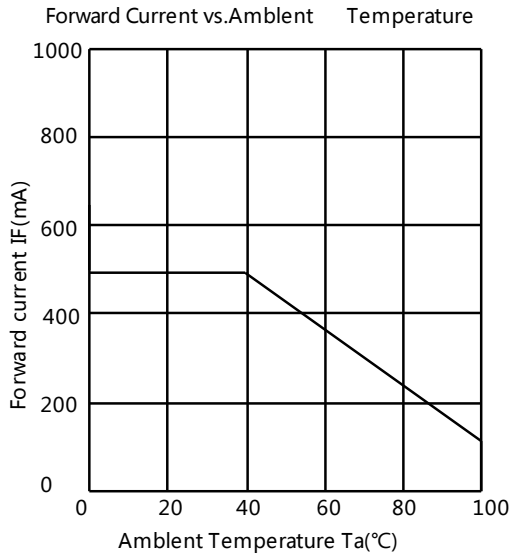
Parameter	White	Units
Power dissipation	3	W
DC Forward Current	300	mA
Peak Forward Current [1]	600	mA
Reverse Voltage	5	V
ESD Sensitivity	500	V
Junction temperature	125	°C
Soldering temperature	260	°C
Manual Soldering time at 260°C(Max)	5	sec
Operating Temperature Range	-40°C To +100°C	
Storage Temperature Range	-40°C To +120°C	

Note:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
- 2.The temperature of Aluminum PCB dose not exceed 55°C

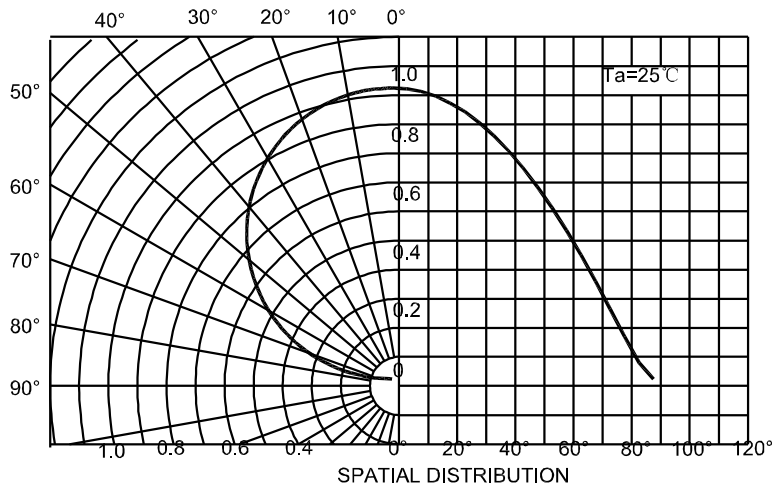
HL-LB001D20W-3B3C3 White

Typical Optical and Electrical Characteristics Curves



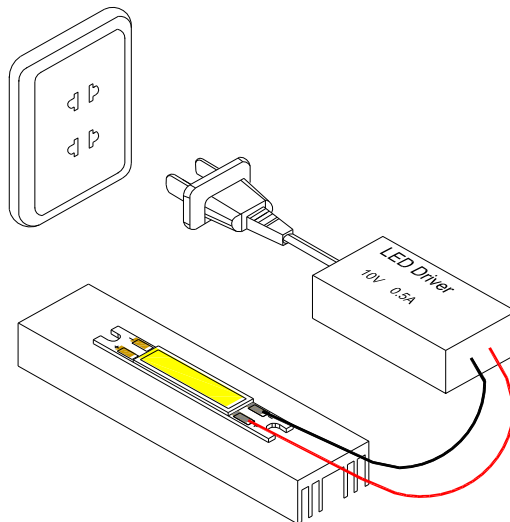
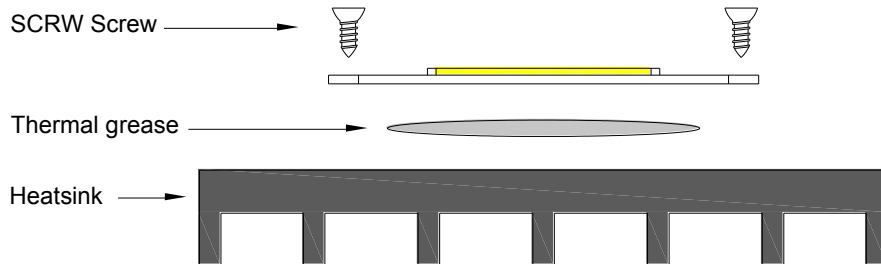
HL-LB001D20W-3B3C3 White

Spatial Distribution Graph



Product Thermal Application Information

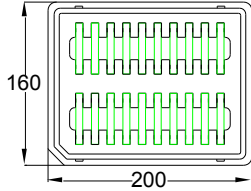
When assembling on PCB or heatsink carrier, thermal grease should be evenly spreaded with a thickness <math>< 100\mu\text{m}</math>.



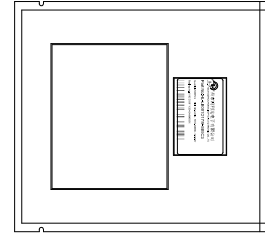
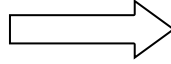
HL-LB001D20W-3B3C3 White

Tape Specifications

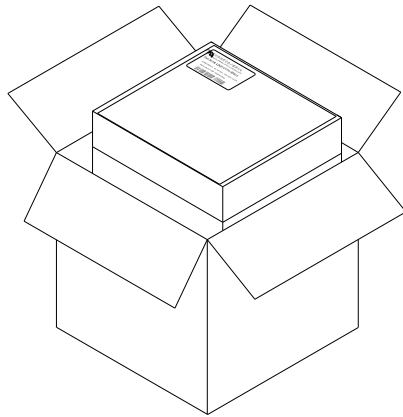
(Units : mm)



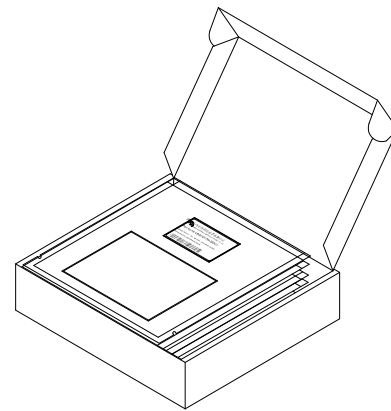
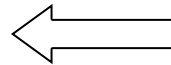
Tray:20PCS



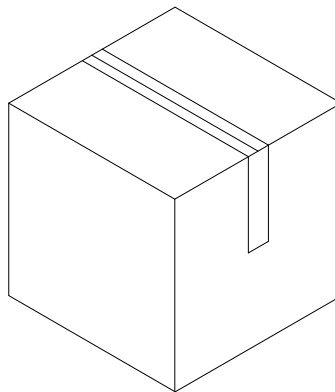
1Tray/ESD Shielding Bag:20PCS



5Inner Box/Outer Box:500PCS



5Bags/Inner Box:100PCS



Outer Box:500PCS

Note:

1.Package storage condition will be limited temperature 20~30°C.