

PRELIMINARY SPEC

Part Number: KAS-4805ZG24S/7

Green



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- DIMENSION: 48mm X 5mm X 1.6mm.
- INSTANT LIGHT.
- LINEAR TYPE.
- HIGH EFFICIENCY.
- LONG OPERATING LIFE.
- LOW POWER CONSUMPTION.
- MORE ENERGY EFFICIENT THAN INCANDESCENT, MOST HALOGEN LAMPS, AND FLUORESCENT LAMP.
- RoHS COMPLIANT.

Description

The package containing fifteen chips is capable of providing high brightness.

High thermal dissipation efficiency is achieved by incorporating aluminium as reflector and also substrate to ensure long operating life.

The Green source color devices are made with InGaAlN Vertical Light Emitting Diode.

Static electricity and surge damage the LEDs.

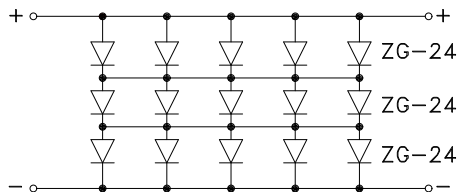
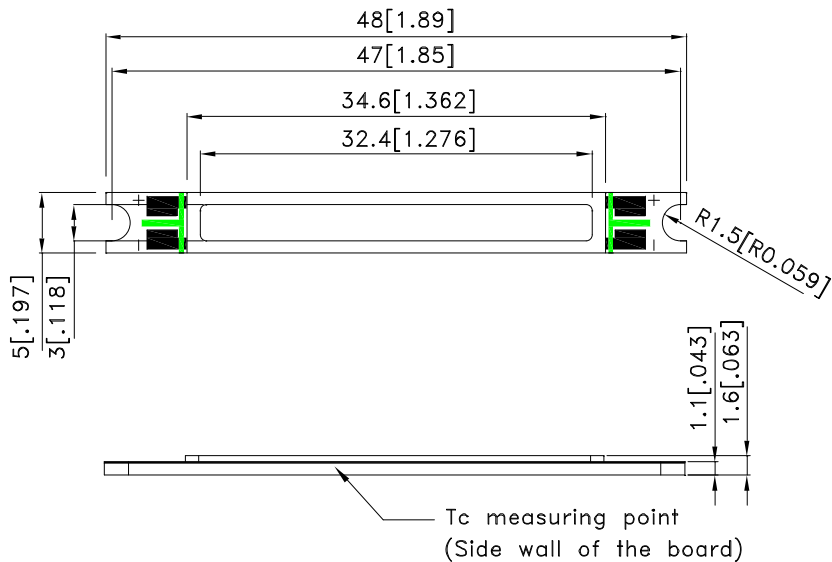
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Applications

- Ceiling lights.
- Contour lights.
- Decoration lights.
- General lighting.
- Architectural lighting.

Package Dimensions



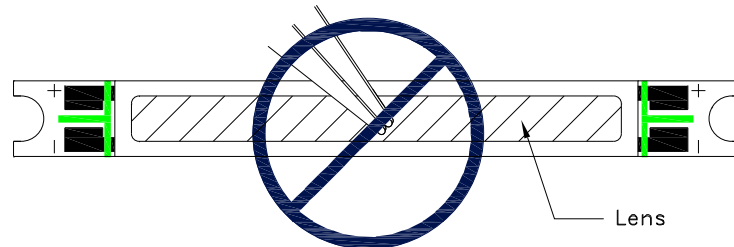
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

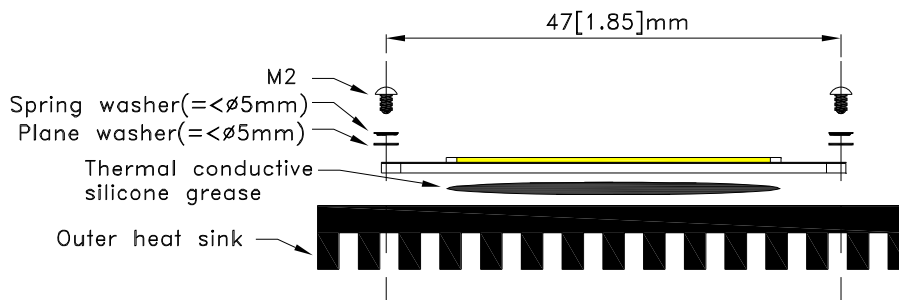


Precautions

1. Do not touch the lens with any sharp object.
2. No stress should be applied on the lens.



3. Thermal grease between the strip and heat sink is recommended to fill air gaps for better thermal conductivity.
4. For securing the LED strip, M2 screws are recommended. The strip should not be bent or stressed in any way which could damage the internal circuit.



5. To prevent damages caused by electrostatic discharge (ESD), it is recommended to wear proper gear such as wristband or anti-static gloves when handling the product.
6. Constant current source is recommended to power the strip. When more than one strip are used, they should be connected in series if possible.
7. Thermal management should be taken into consideration when using the product. Maximum driving current should be reduced accordingly at higher ambient temperature to prevent overheating.
8. Soldering recommendations:
 - Soldering iron power should not exceed 40W, and should not be in contact with the joint for more than 3.5 secs.
 - The maximum soldering temperature should be less than 350°C.
 - Do not touch the product immediately after soldering.
 - Not reflow compatible.

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
Forward Current	I _F	700	mA
Forward Pulse Current [1]	I _{FP}	1000	mA
Power Dissipation	P _d	8.05	W
LED Junction Temperature	T _j	120	°C
Operating Temperature	T _{opr}	-30~+100	°C
Storage Temperature	T _{stg}	-40~+120	°C
Case Temperature	T _c	100	°C

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

Electrical / Optical Characteristics

Part Name	Device	Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
KAS-4805ZG24S/7	Green	Forward Voltage [2]	V _F	10.5	11	11.5	V	I _F =700mA
		Luminous Flux [3]	Φ _v	150	180	-	lm	I _F =700mA
		Wavelength at peak emission[4]	λ _{peak}	-	515	-	nm	I _F =700mA
		Dominant Wavelength	λ _{dom}	-	525	-	nm	I _F =700mA
		Spectral bandwidth at 50%Φ _{REL} MAX	Δλ _{1/2}	-	30	-	nm	I _F =700mA
		Temperature coefficient of λ _{peak}	TCλ _{peak}	-	0.14	-	nm/°C	I _F =700mA
		Temperature coefficient of λ _{dom}	TCλ _{dom}	-	0.11	-	nm/°C	I _F =700mA
		Temperature coefficient of Forward Voltage	ΔV _F /ΔT	-	-4	-	mV/°C	I _F =700mA
		Thermal Resistance	R _{th j-c}	-	3.5	-	°C/W	I _F =700mA
		Emission Angle	2 θ 1/2 X direction	-	130	-	°	I _F =700mA
2 θ 1/2 Y direction	-		130	-	°	I _F =700mA		

Notes:

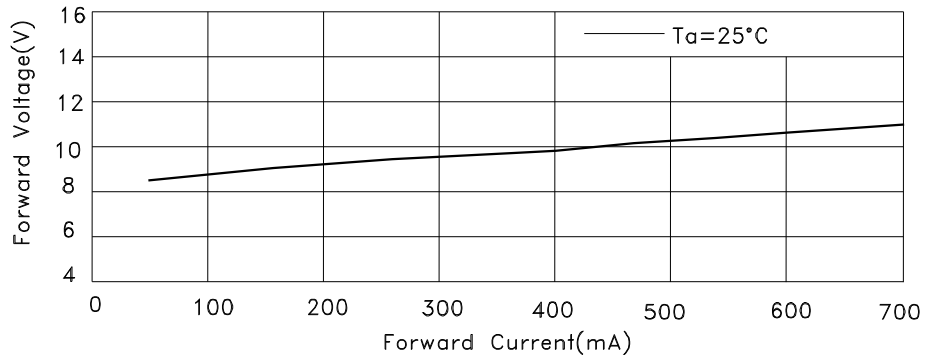
2. Forward Voltage is measured with an accuracy of +/-0.1V.

3. Flux is measured with an accuracy of +/-15%.

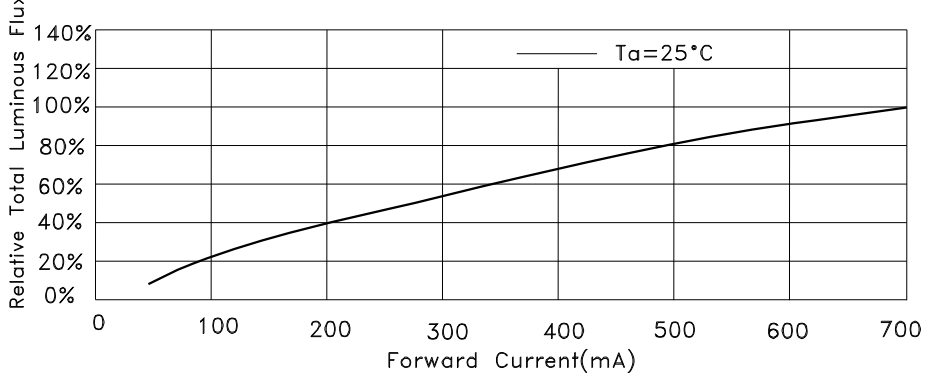
4. Wavelength :+/-0.1nm.

Test Item	Test Condition
Moisture-proof Test	85°C , 85%RH for 1000 hours

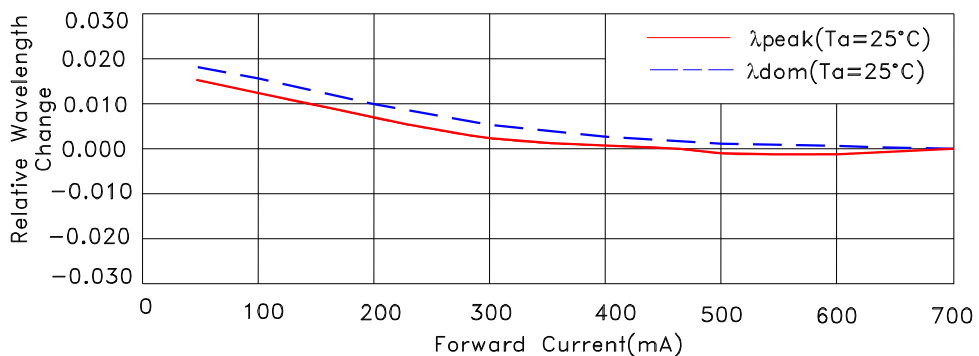
Forward Current – Forward Voltage Characteristic

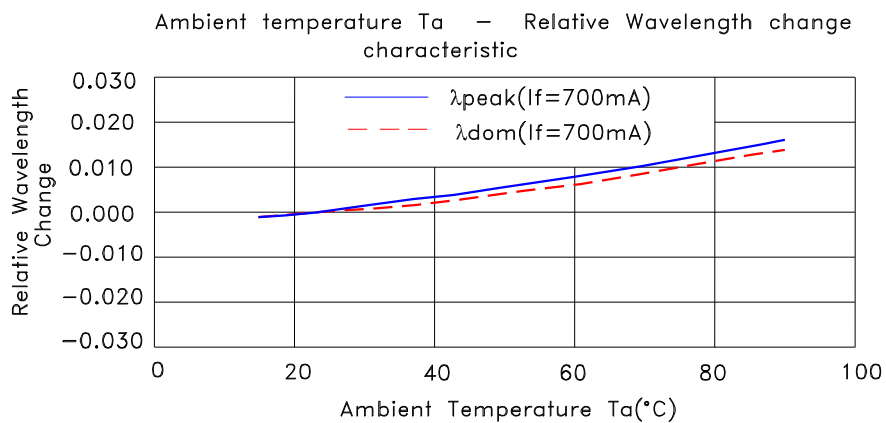
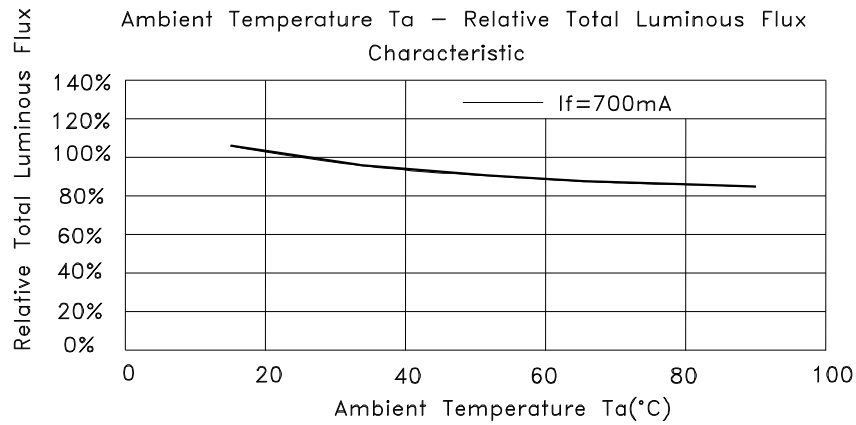
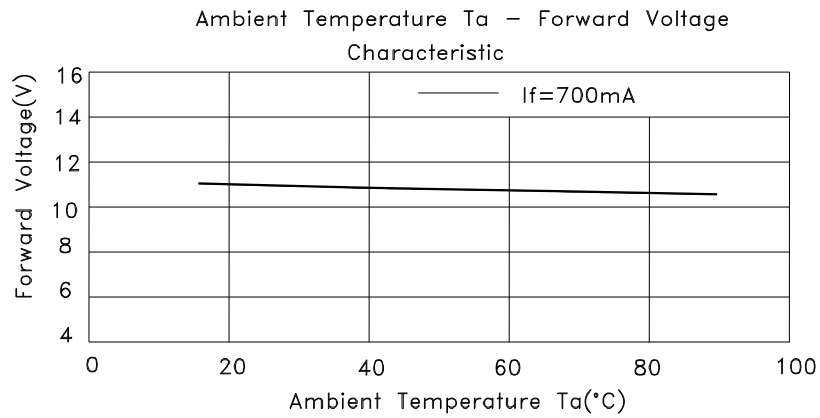


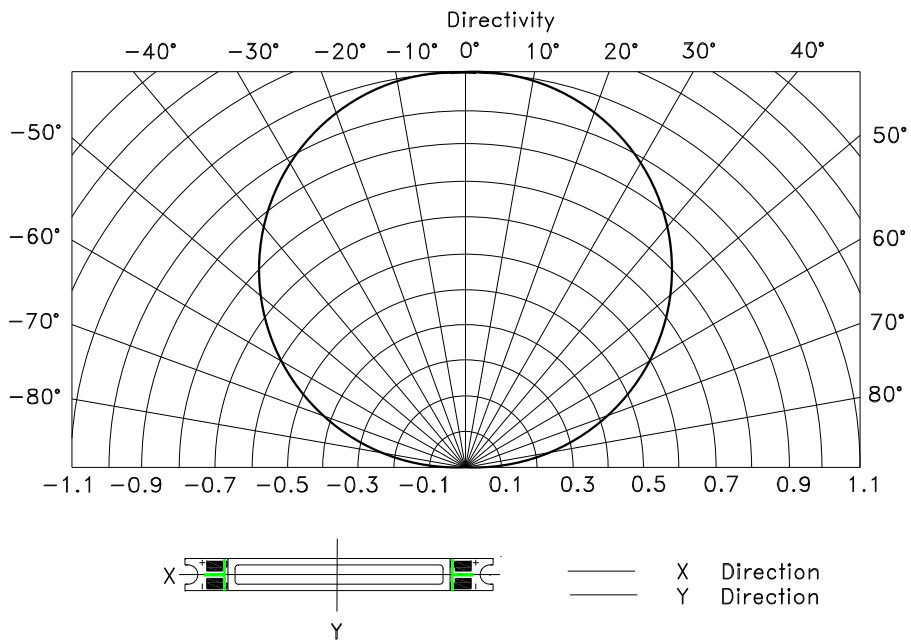
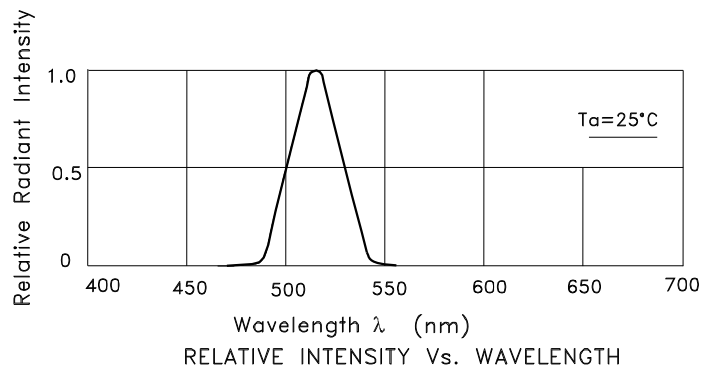
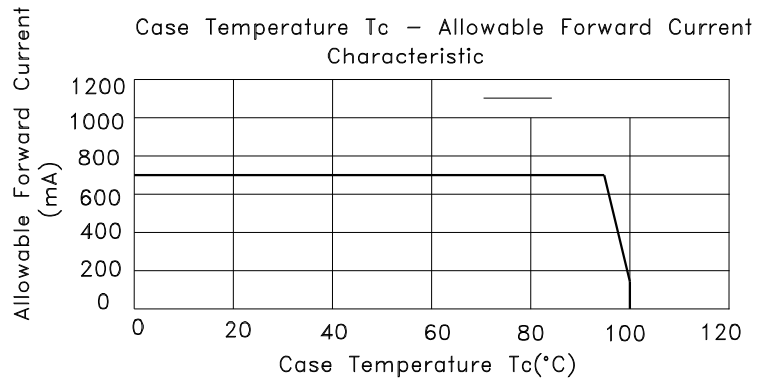
Forward Current – Relative Total Luminous Flux Characteristic



Forward Current – Relative Wavelength Change Characteristic







PACKING & LABEL SPECIFICATIONS

KAS-4805ZG24S/7

(1) Primary packing

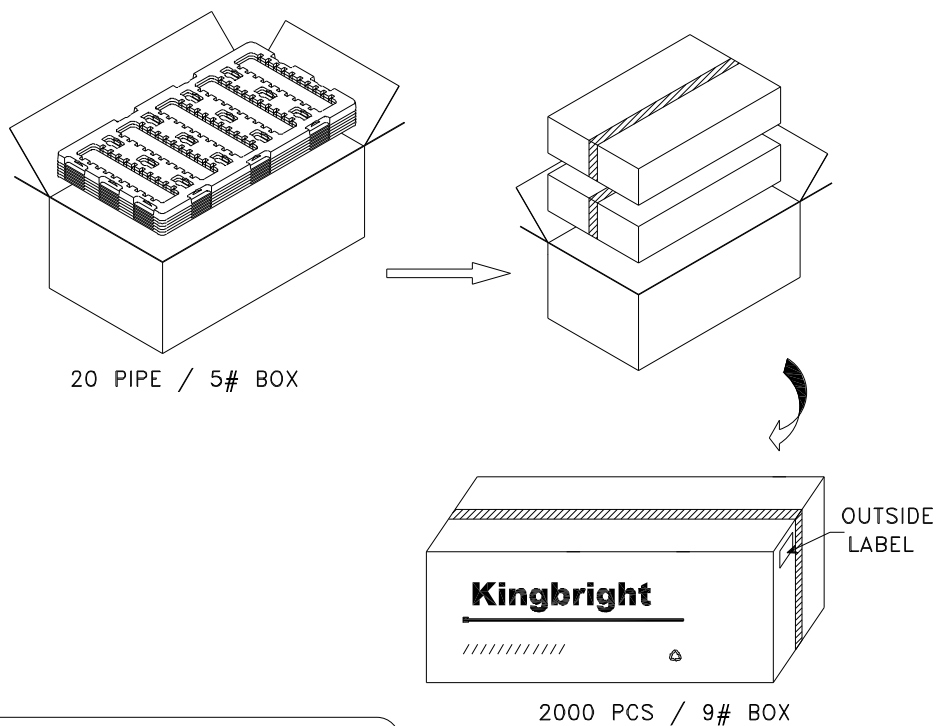
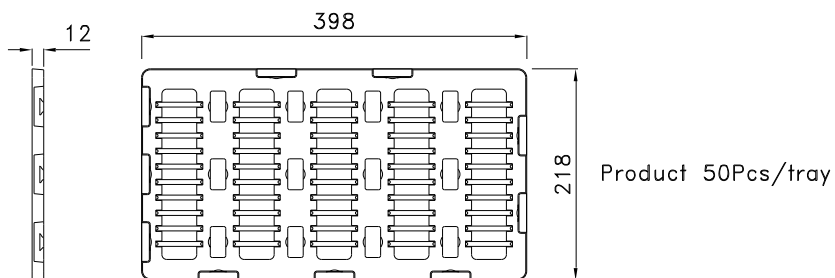
An empty tray is placed on top of twenty-tier tray which contain 50 pieces each.


Tray (Dimensions:398X218X12mm/Materials:Electrically conductive PS)

(2)second packing

A set of twenty-one trays is placed in 5# box .(Dimensions of box:410mmX229mmX159mm maximum of 1000 pieces per box)

An indication label which specifies product name, quantity, lot number and shipment date is attached to the outside of the 9# box. (Dimensions of box:441mmX251mmX346mm maximum of 2000 pieces per box)



Kingbright	
P/NO: KAS-4805	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	