

Backlight Displays
Technical Data Sheet

Part No.: KWB-R6446W-2W

Features:

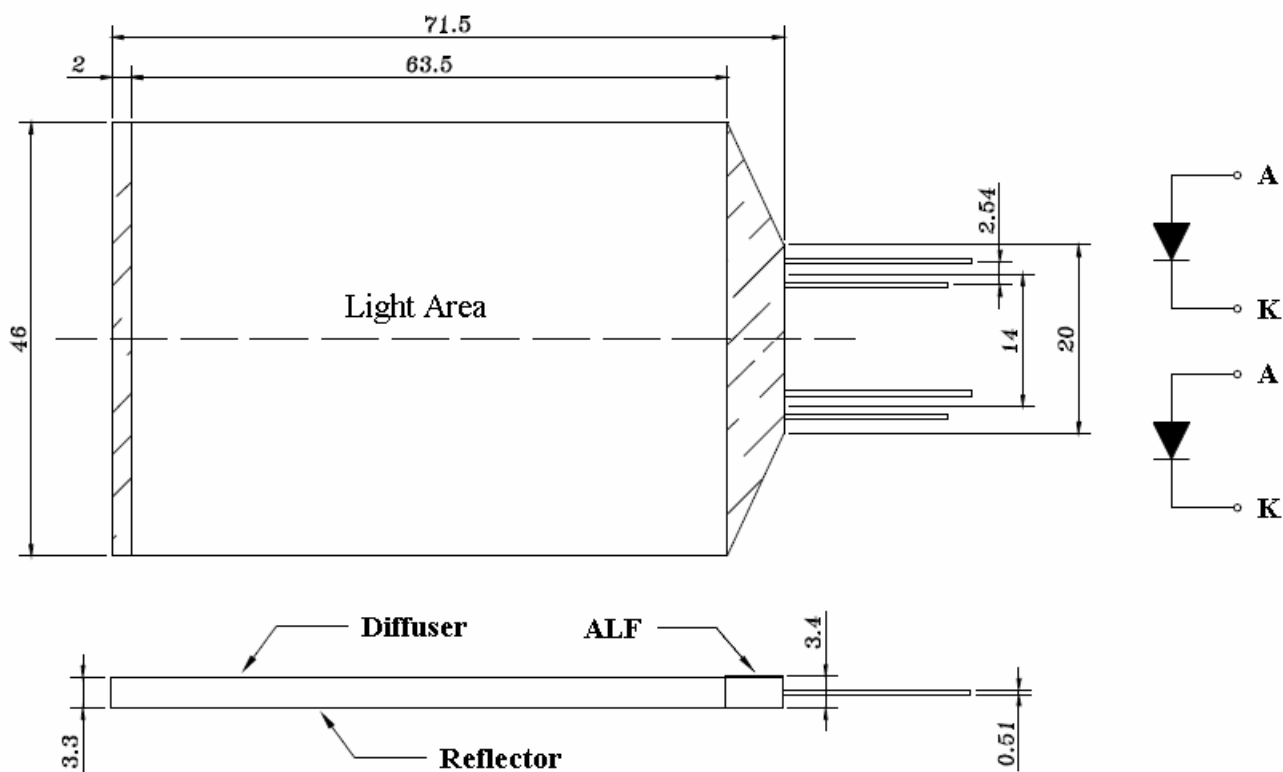
- ◇ Low power requirements.
- ◇ Large area, uniform, bright light emitting surface.
- ◇ Easy for installation.
- ◇ Color: White.
- ◇ The product itself will remain within RoHS compliant Version.

Descriptions:

- ◇ The White source color devices are made with InGaN on sapphire/SiC substrate light emitting diode.

Applications:

- ◇ Flat backlight for LCD, switches and symbols.
- ◇ Indicator and backlight in office equipment.
- ◇ Indicator and backlight for battery driven equipment.
- ◇ Indicator and backlight for audio and video equipment.
- ◇ Automotive: Backlighting in dashboards and switches.
- ◇ Telecommunication: Indicator and backlighting in telephone and fax.

Package Dimension:


Part No.	Chip Material	Face Color	Source Color
KWB-R6446W-2W	InGaN	White	White

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (.010") unless otherwise specified.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25°C

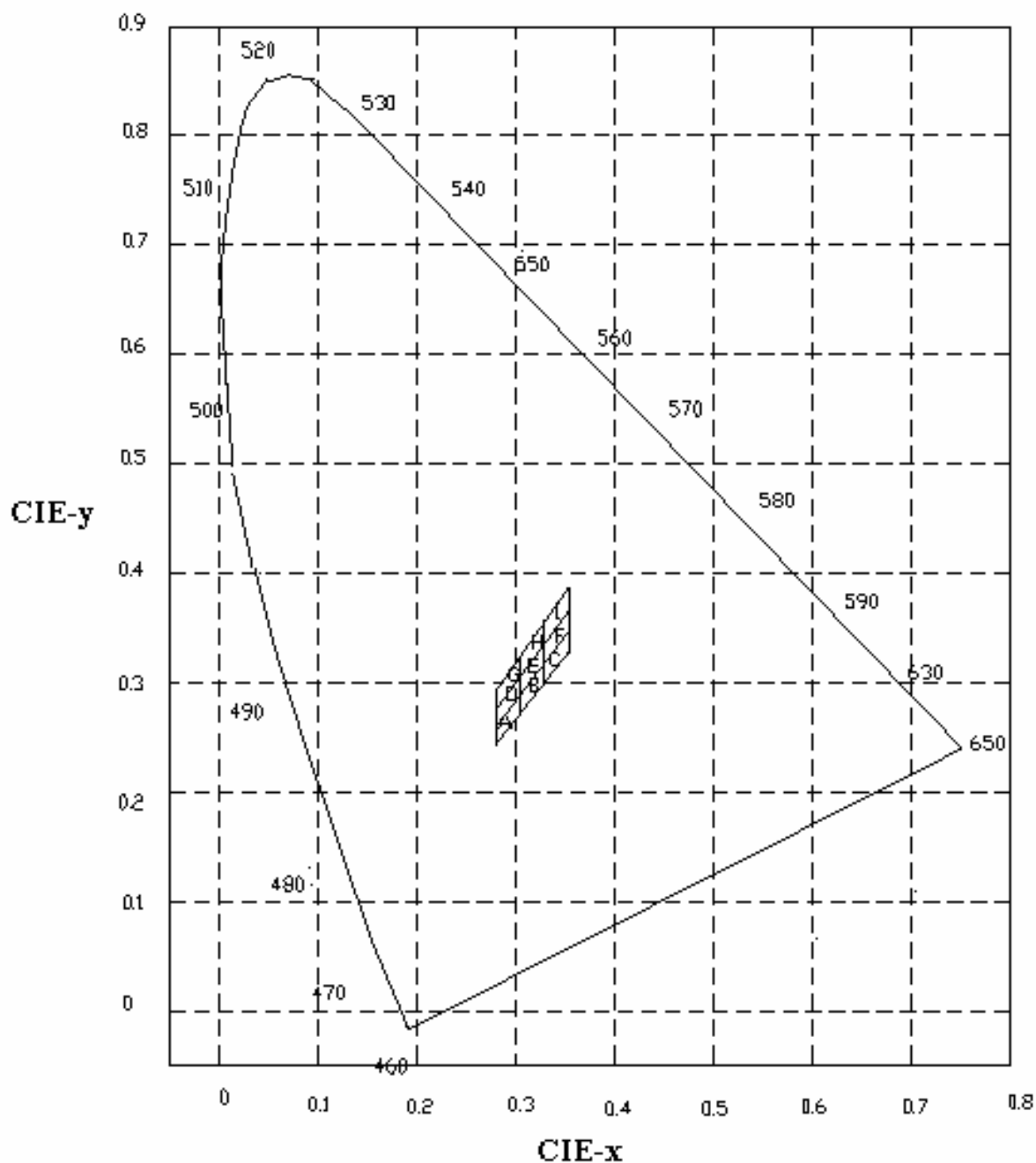
Parameters	Symbol	Max.	Unit
Power Dissipation (Per Chip)	PD	100	mW
Peak Forward Current (Per Chip) (1/10 Duty Cycle, 0.1ms Pulse Width)	IFP	50	mA
Forward Current (Per Chip)	IF	25	mA
Reverse Voltage (Per Chip)	VR	5	V
Electrostatic Discharge	ESD	400	V
Operating Temperature Range	Topr	-20°C to +70°C	
Storage Temperature Range	Tstg	-25°C to +75°C	
Lead Soldering Temperature [4mm (.157") From Body]	Tsld	260°C for 5 Seconds	

Electrical Optical Characteristics at Ta=25°C

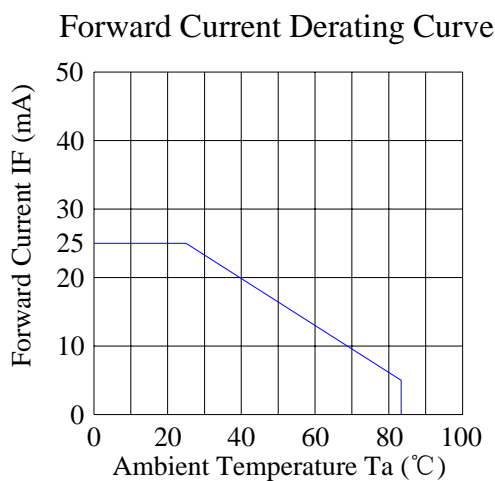
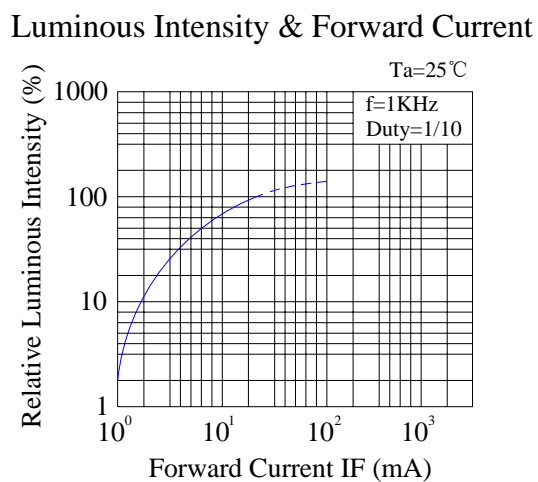
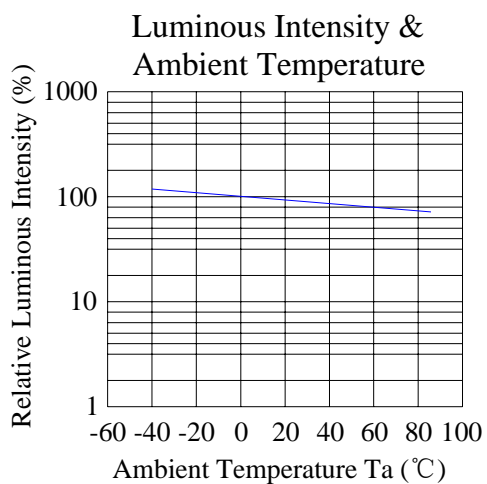
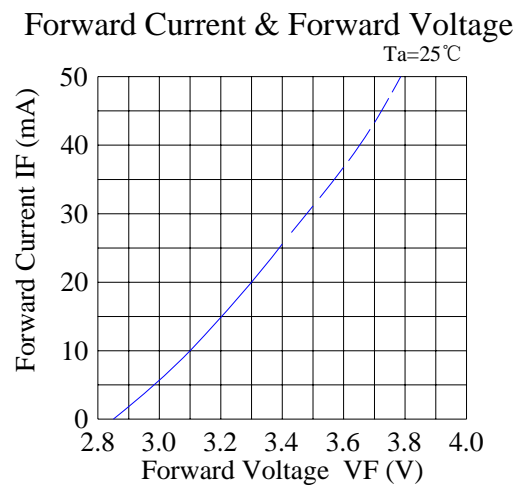
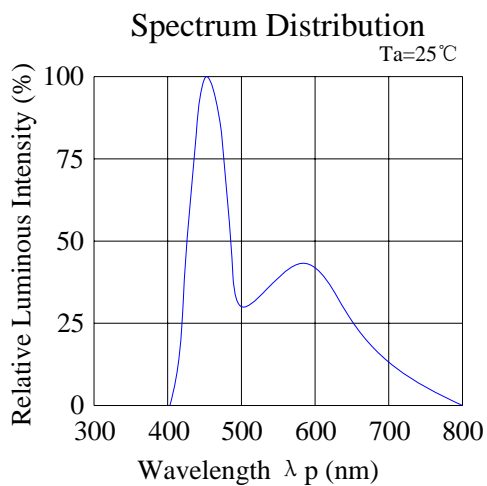
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	55	65	75	cd/m ²	IF=20mA
Forward Current (Per Chip)	IF	15	20	25	mA	VF=3.30V
Chromaticity Coordinates	x	---	0.27	---		IF=20mA
	y	---	0.28	---		IF=20mA
Forward Voltage (Per Chip)	VF	3.00	3.30	3.60	V	IF=20mA
Reverse Current (Per Chip)	IR	---	---	10	μA	VR=5V

Notes:

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- It use many parameters that correspond to the CIE 1931 2°. X, Y, and Z are CIE 1931 2° values of Red, Green and Blue content of the measurement.

CIE Chromaticity Diagram:


Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)



Please read the following notes before using the Product:

1. Over-current-proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Storage

2.1 Before opening the package, the LED BACKLIGHT should be kept at 30°C or less and 90%RH or less.

2.2 The LED BACKLIGHT should be used within a year.

2.3 After opening the package, the LED BACKLIGHT should be kept at 30°C or less and 70%RH or less.

2.4 The LED BACKLIGHT should be used within 168 hours (7 days) after opening the package.

3. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 260°C for 5 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

4. Caution in ESD

Static Electricity and surge damages the LED BACKLIGHT. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED BACKLIGHT. All devices equipment and machinery must be properly grounded.