



HUIYUAN ELECTRONIC CO.,LTD.

## TECHNOLOGY DATA SHEET & SPECIFICATIONS

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MODEL: 0805W2C-KHB-A

### Features

- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Mono-color type
- Pb-free



### Descriptions

- The 0805 SMD LED is much smaller than lead frame type components thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained
- Besides, lightweight makes them ideal for miniature applications.etc

### Usage Notes:

- Surge will damage the LED
- When using LED, it must use a protective resistor in series with DC current about 20mA

### Applications

- Automotive: Backlighting in dashboard and switch
- Telecommunication: Indicator and backlighting in telephone and fax
- Flat backlight for LCD, switch and symbol
- General use



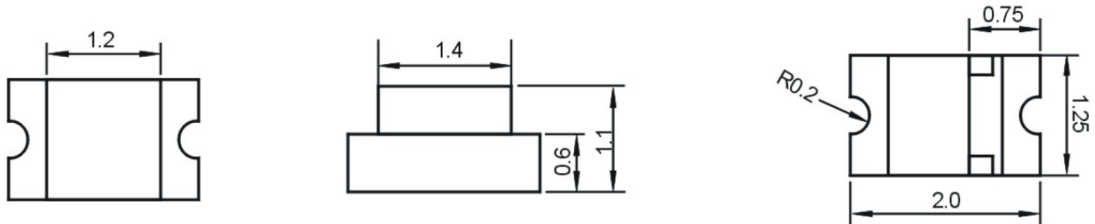
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### Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
0805W2C-KHB-A	InGaN	White	Water clear

### Package Dimensions



UNIT:mm

### Notes:

- Other dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Protruded resin under flange is 1.5mm Max LED.
- Bare copper alloy is exposed at tie-bar portion after cutting.

**TECHNOLOGY DATA SHEET & SPECIFICATIONS****MODEL: 0805W2C-KHB-A****Absolute Maximum Rating ( $T_a=25^{\circ}\text{C}$ )**

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	$I_{\text{FPM}}$	70	mA
Forward Current	$I_{\text{FM}}$	30	mA
Reverse Voltage	$V_{\text{R}}$	5	V
Power Dissipation	$P_{\text{D}}$	140	mW
Operating Temperature	$T_{\text{opr}}$	-40~+80	$^{\circ}\text{C}$
Storage Temperature	$T_{\text{stg}}$	-40~+100	$^{\circ}\text{C}$
Soldering Heat (5s)	$T_{\text{sol}}$	260	$^{\circ}\text{C}$

**Electro-Optical Characteristics ( $T_a=25^{\circ}\text{C}$ )**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_{\text{V}}$	200	---	300	mcd	IF=20mA(Note 1)
Viewing Angle	$2\theta_{1/2}$	---	120	---	Deg	(Note 2)
Peak Emission Wavelength	$\lambda_{\text{p}}$	---	---	---	nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$	25	30	35	nm	IF=20mA
Forward Voltage	$V_{\text{F}}$	2.9	---	3.5	V	IF=20mA
Reverse Current	$I_{\text{R}}$	---	---	10	$\mu\text{A}$	VR=5V

**Note:**

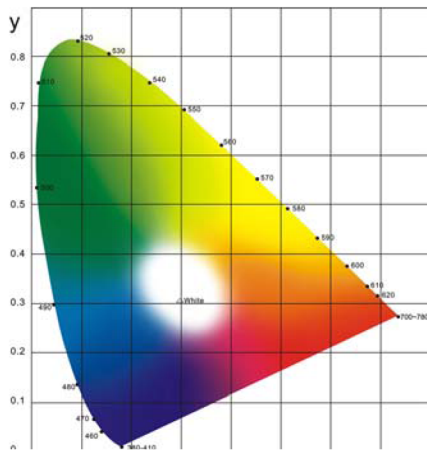
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



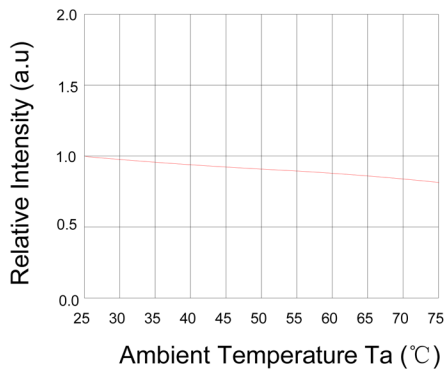
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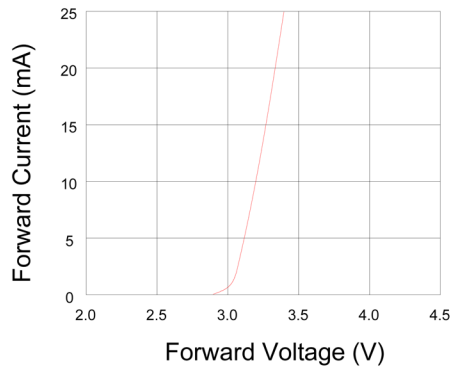
**Typical Electro-Optical Characteristics Curves**



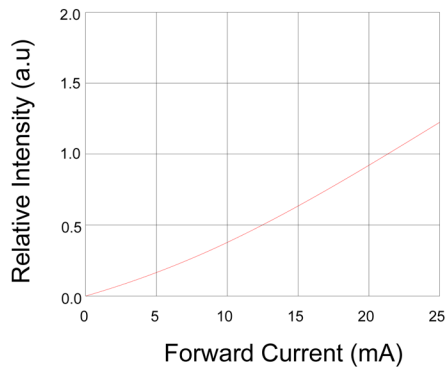
Relative Intensity VS. Ambient Temp



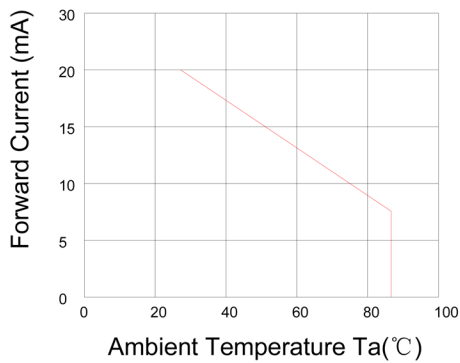
Forward Current VS. Forward Voltage



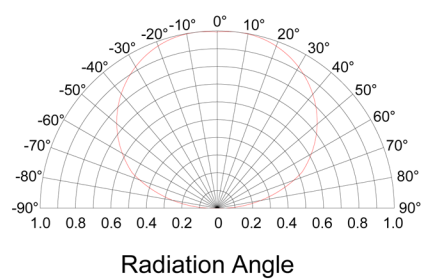
Forward Current VS. Relative Intensity



Forward Current VS. Ambient Temp.



Radiation Characteristics





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### Notes

1. Above specification may be changed without notice. Hyled will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Hyled assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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