



HUIYUAN OPTO-ELECTRONIC CO.,LTD.

TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 5003R2D-EHA-S

Features

- High efficiency
- Low Power consumption
- General purpose leads
- Selected minimum intensities
- Available on tape and reel
- Pb free



Descriptions

- The LED lamps are available with different colors, intensities, epoxy colors, 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

- Status indicators
- Commercial use
- Advertising Signs



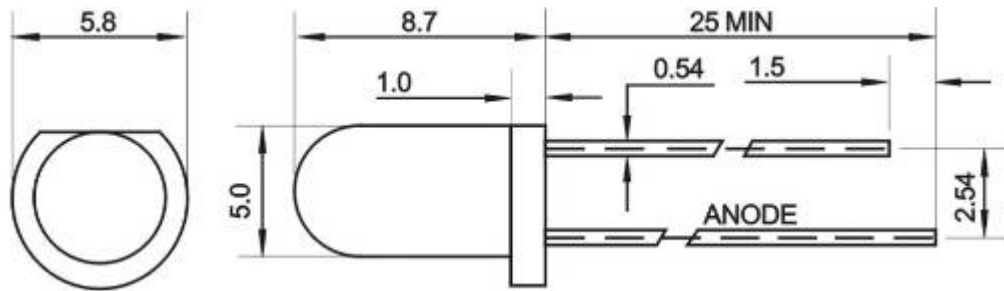
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Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
5003R2D-EHA-S	GaAsP	Red	Color Diffused

Package Dimensions



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.



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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	50		100	mcd	IF=20mA(Note1)
Viewing Angle	2θ _{1/2}	40	---	60	Deg	(Note 2)
Peak Emission Wavelength	λ _p	630	---	640	nm	IF=20mA
Spectral Line Half-Width	Δλ	15	20	25	nm	IF=20mA
Forward Voltage	V _F	1.9	---	2.3	V	IF=20mA
Reverse Current	I _R	---	---	10	μA	VR=5V

Note:

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

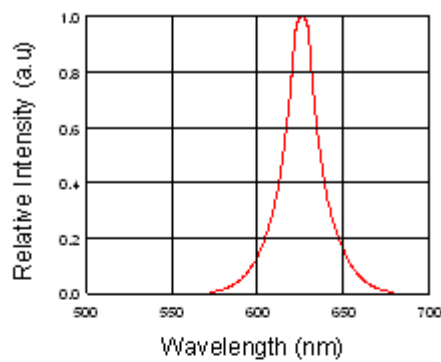


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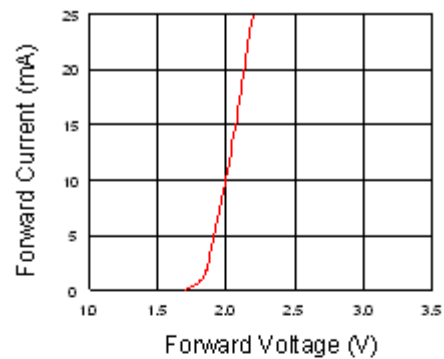
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Typical Electro-Optical Characteristics Curves

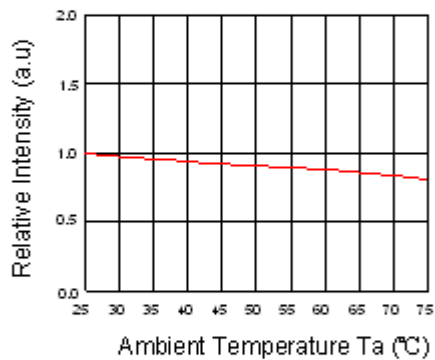
Relative Intensity VS. Wavelength



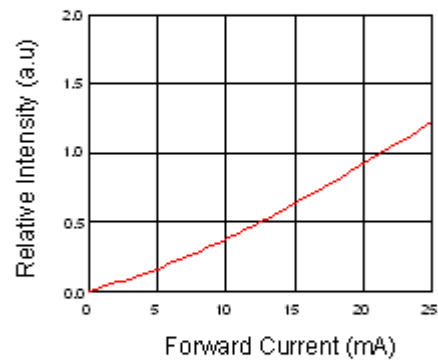
Forward Current VS. Forward Voltage



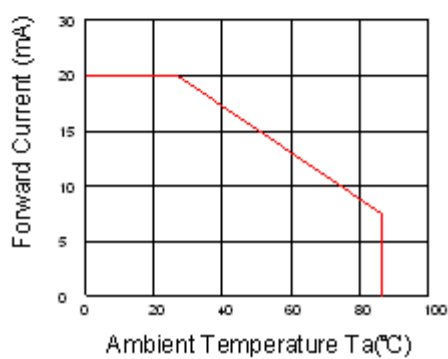
Relative Intensity VS. Ambient Temp



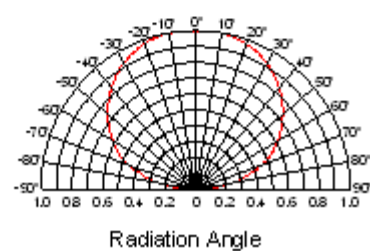
Forward Current VS. Relative Intensity



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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