



TECHNOLOGY DATE SHEET & SPECIFICATIONS

MODEL: 5234SDB2DC

Features

- High luminous intensity output
- Oval Shape
- Well defined spatial radiation
- Wide viewing angle($2\theta_{1/2}$): $70^\circ / 30^\circ$
- UV resistant epoxy
- Pb free



Descriptions

- This precision optical performance oval LED is specifically designed for passenger information signs
- This lamp has matched radiation patterns with,Red Or green color mixing color applications
- Superior performance in outdoor environment

Usage Notes:

- The ultra bright LED is an electrostatic insensitive device,so static electricity and surge will damage the LED.It is required to wear a wrist-band when handling the LED. All device, equipment,machinery, desk and ground must be properly grounded
- When using LED, it must use a protective resistor in series with DC current about 20mA

Applications

- Full color/video signs
- Message boards
- Variable message signs(VMS)
- Commercial outdoor advertising



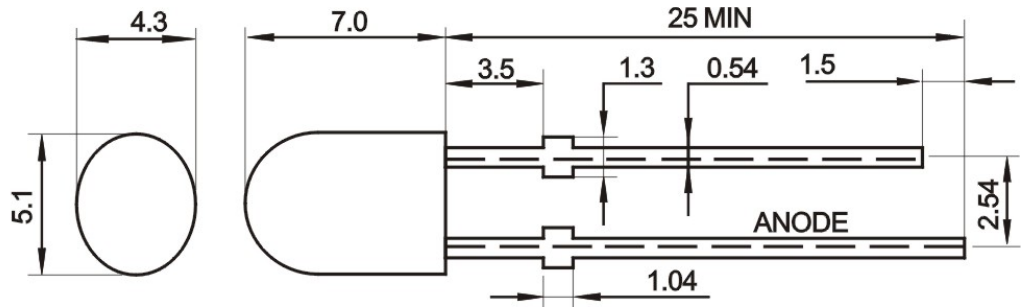
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Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
5234SDB2DC	InGaN	Blue	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.

Absolute Maximum Rating ($T_a=25^{\circ}\text{C}$)

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



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Soldering Heat (5s)	Tsol	260	°C
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Electro-Optical Characteristics (T_a=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	6000	7500	9000	mcd	IF=20mA(Note1)
Viewing Angle	2θ _{1/2}	---	X:70° Y:30°	---	Deg	(Note 2)
Peak Emission Wavelength	λ _p	460	465	470	nm	IF=20mA
Spectral Line Half-Width	Δλ	20	25	30	nm	IF=20mA
Forward Voltage	V _F	2.9	---	3.5	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.

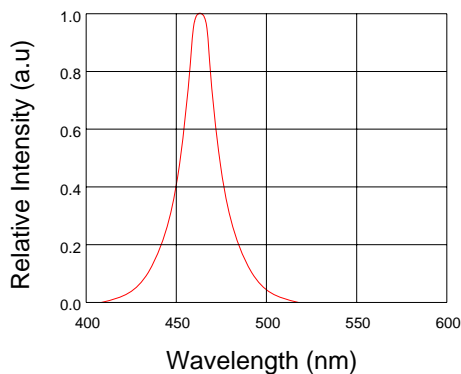


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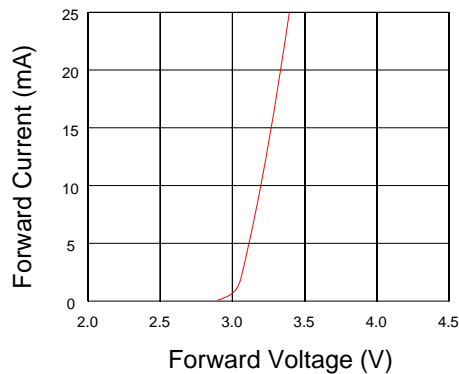
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Typical Electro-Optical Characteristics Curves

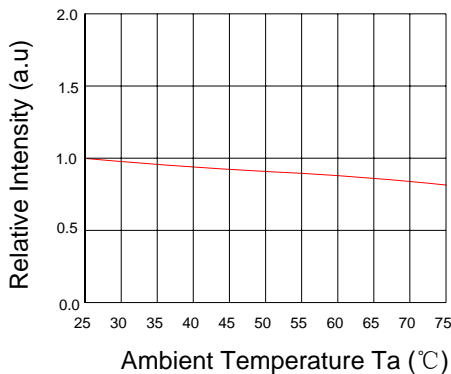
Relative Intensity VS. Wavelength



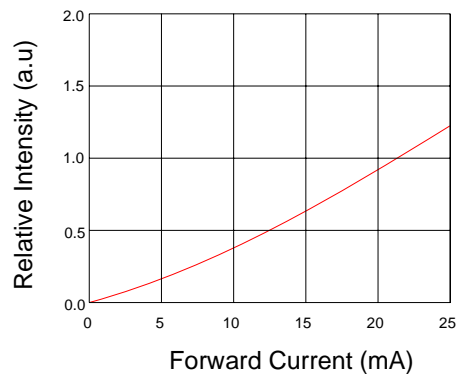
Forward Current VS. Forward Voltage



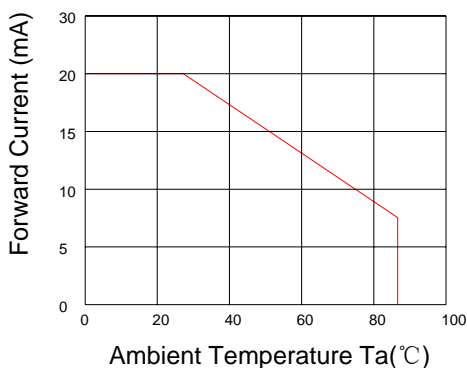
Relative Intensity VS. Ambient Temp



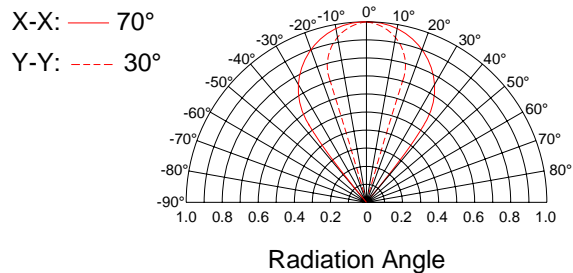
Forward Current VS. Relative Intensity



Forward Current VS. Ambient Temp.



Radiation Characteristics





HUIYUAN ELECTRONIC CO.,LTD.
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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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