



#### **Features**

High efficiency

Low Power consumption

General purpose leads

Selected minimum intensities

Available on tape and reel

Pb free

## **Descriptions**

The series is specially designed for applications requiring higher brightness

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

Superior performance in outdoor environment

### **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

Back lighting

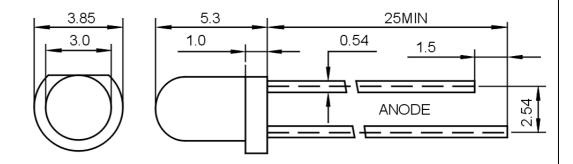
#### **Device Selection Guide**

LED Part No.	Cl	hip		
	Material	Emitted Color	Lens Color	
3-22B-WC46-20	AlGaInP	Red	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 (Ta=25℃)

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	$I_{FPM}$	100	mA
Forward Current	$I_{FM}$	30	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_{D}$	140	mW
Operating Temperature	Topr	-40~+80	$^{\circ}$
Storage Temperature	Tstg	-40~+100	$^{\circ}$
Soldering Heat (5s)	Tsol	260	$^{\circ}$





# Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	<b>Test Condition</b>
Luminous Intensity	Iv	800	1200		mcd	IF=20mA(Note1)
Viewing Angle	$2\theta_{1/2}$	15	20	25	Deg	(Note 2)
Peak Emission Wavelength	λр	620	630	635	nm	IF=20mA
Spectral Line Half-Width	Δλ	15	20	25	nm	IF=20mA
Forward Voltage	$V_{\rm F}$	1.9		2.3	V	IF=20mA
Reverse Current	$I_R$			10	μΑ	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.

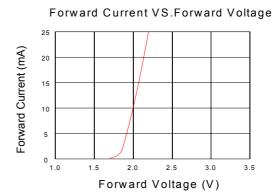




## **Typical Electro-Optical Characteristics Curves**

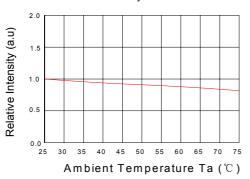
Relative Intensity VS. Wavelength

Relative Intensity (a.u) 0.4 0.2 0.0 700

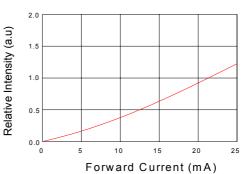


Relative Intensity VS. Ambient Temp

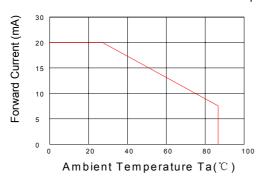
Wavelength (nm)



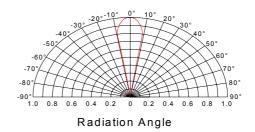
Forward Current VS.Relative Intensity



Forward Current VS.Ambient Temp.



Radiation Characteristics



#### **Notes**

- 1. Above specification may be changed without notice. EVER-LED 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. EVER-LED 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.