



**ETG Inc.**

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# **ETG-5WB590-30**

## **DATA SHEET**

QC:

ENG:

Prepared By:



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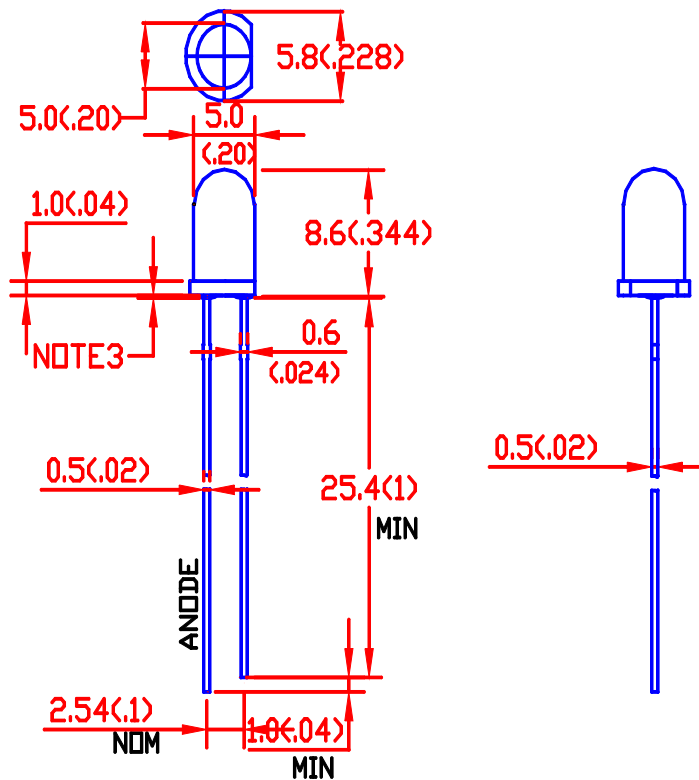
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**Features:**

- ◆ High intensity
- ◆ Standard T-1 3/4 diameter package
- ◆ General purpose leads
- ◆ Reliable and rugged

**Package Dimensions:**



Part NO.	Chip Material	Lens Color	Source Color
ETG-5WB590-30	AlInGaP	Water Clear	Yellow

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

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Parameter	MAX.	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 50	0.4	mA/
Reverse Voltage	5	V
Operating Temperature Range	-25 to +80	
Storage Temperature Range	-40 to +100	
Lead Soldering Temperature [4mm(.157") From Body]	260 for 5 Seconds	

**Electrical Optical Characteristics at Ta=25**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$		5500		mcd	$I_f=20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$		30		Deg	(Note 2)
Peak Emission Wavelength	$\lambda_p$		592		nm	$I_f=20\text{mA}$
Dominant Wavelength	$\lambda_d$		590	595	nm	$I_f=20\text{mA}$ (Note 3 &4)
Spectral Line Half-Width	$\lambda$		25		nm	$I_f=20\text{mA}$
Forward Voltage	$V_f$		1.9	2.5	V	$I_f=20\text{mA}$
Reverse Current	$I_R$	---	---	100	$\mu\text{A}$	$V_R=5\text{V}$

**Notes:**

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.
3. The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
4. Wavelength binning can be 589~592nm and 592~595nm.

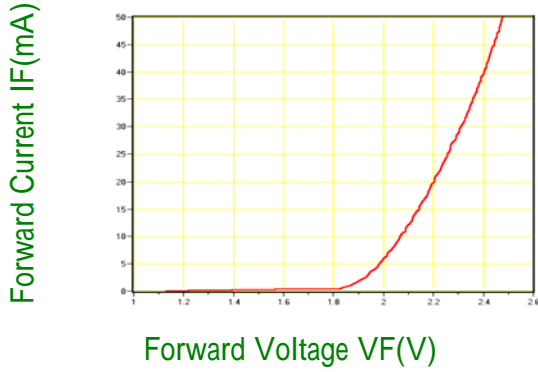


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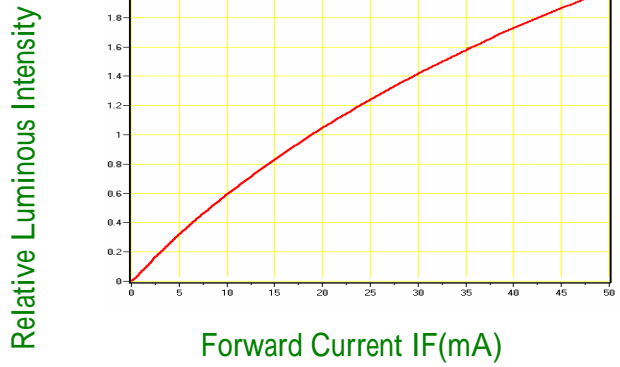
### Typical Characteristics

The data typical, and the value is not guaranteed.

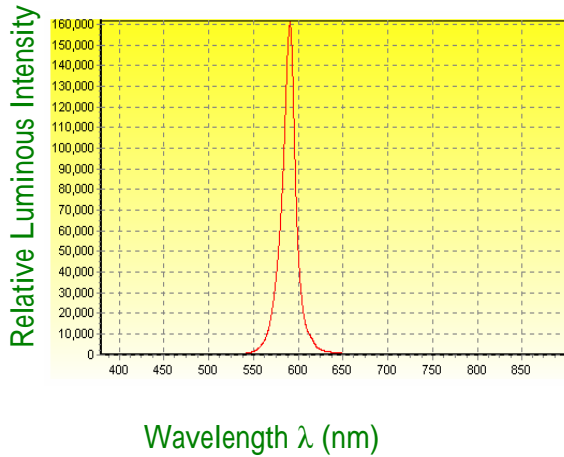
IF-VF(Ta=25 °C)



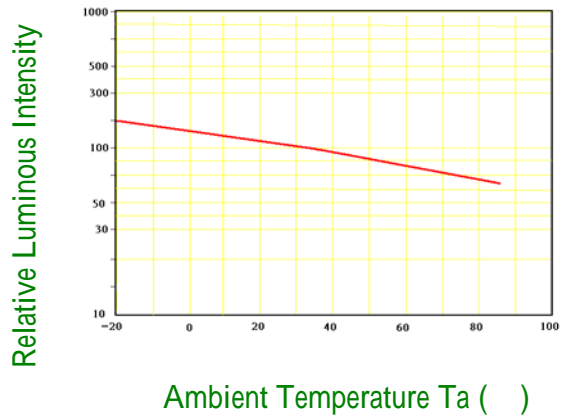
Relative Luminous Intensity-IF (Ta=25 °C)



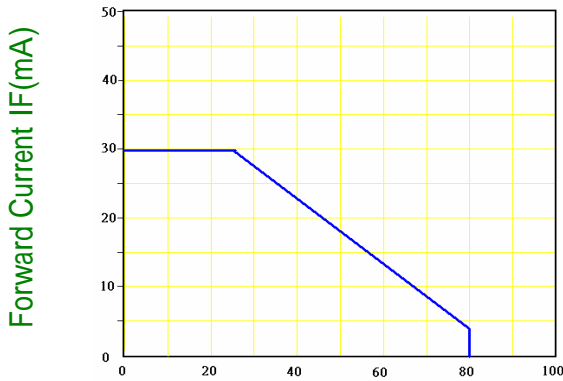
Wavelength Characteristics (Ta=25 °C)



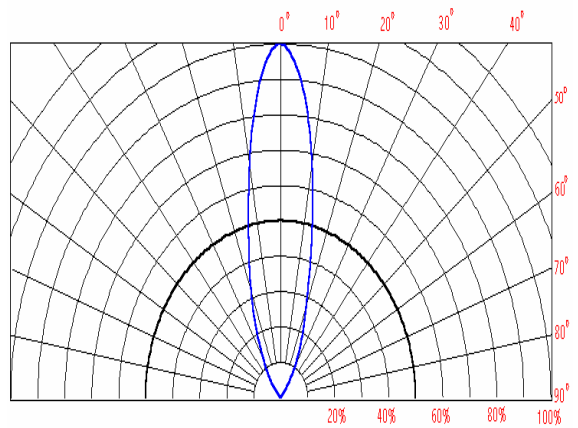
Relative Luminous Intensity-Ta



IF-Ta



Directive Characteristics (Ta=25 °C)





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