



深圳市弘欣顺光电有限公司

H.X.S.L.TECH.CO.,LTD

DATA BOOK

DOC.NO: HXS-A504CRR-001

DATE : 12-12-2010

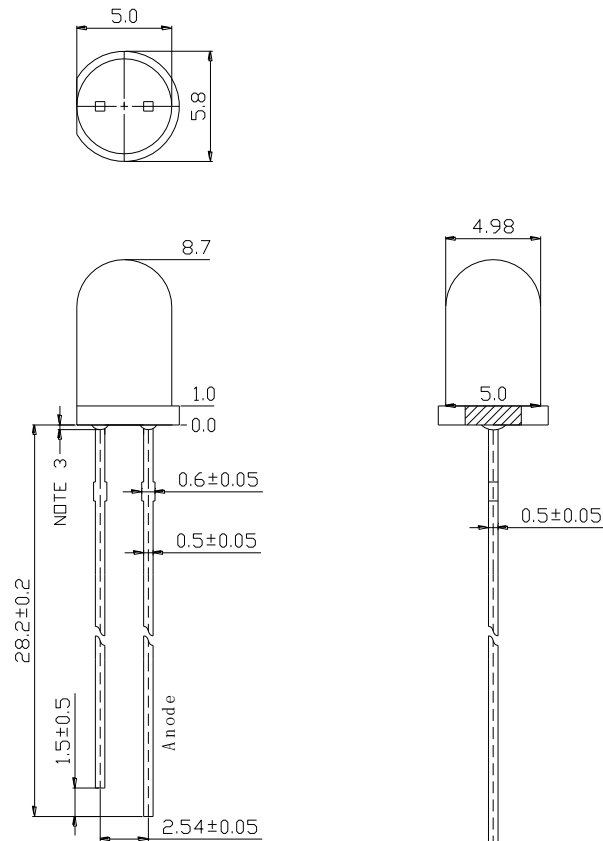
Approved By: _____ ENG: _____ QC: _____



Part Number: SP1012022-22

Unit: 5mm

Package Dimensions: 红发红透明



Model	Lens	Source Color
HXS-A504CRR-001	Red Clear	GaInN Red

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (.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.



Absolute Maximum Ratings at Ta=25°C

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse width)	80	mA
DC Forward Current	20	mA
Dreading Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operation Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +90°C	
Lead Soldering Temperature [4mm (.157") From Body]	260°C for 5 Seconds	



Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_v	3000	---	4000	mcd	$I_f=20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$	---	15	---	Deg	(Note 2) Fig.5
Peak Emission Wavelength	λ_p	---	620	---	nm	
Dominant Wavelength	λ_d	---	---	627	nm	Note 3
Spectral Line Half - Width	$\Delta\lambda$	---	30	---	nm	
Forward Voltage	V_f	1.8	---	2.2	V	$I_f=20\text{mA}$
Reverse Current	I_R	---	---	10	μA	$V_R=5\text{V}$

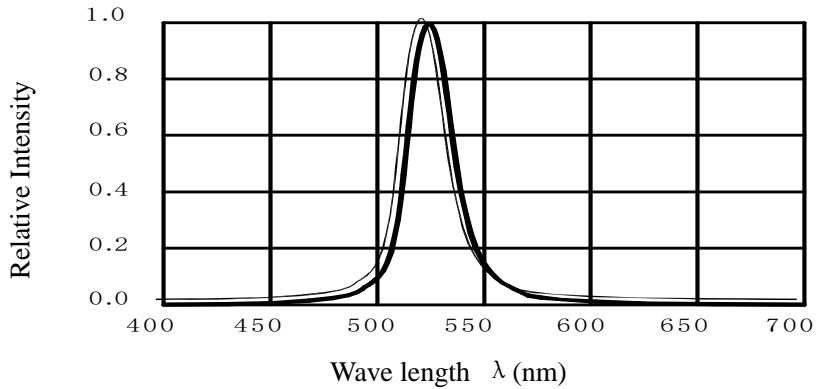
Notes:

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 λ_d is derived from the CIE chromaticity diagram and represents the single wavelength, which defines the color of the device.
4. I_v classification code is marked on each packing bag.

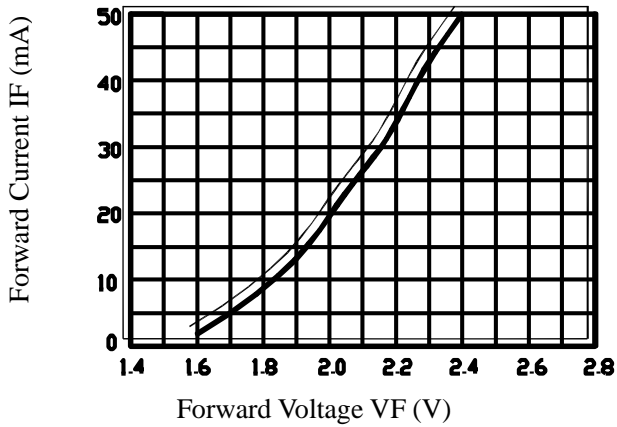


Typical Electrical / Optical Characteristics Curves

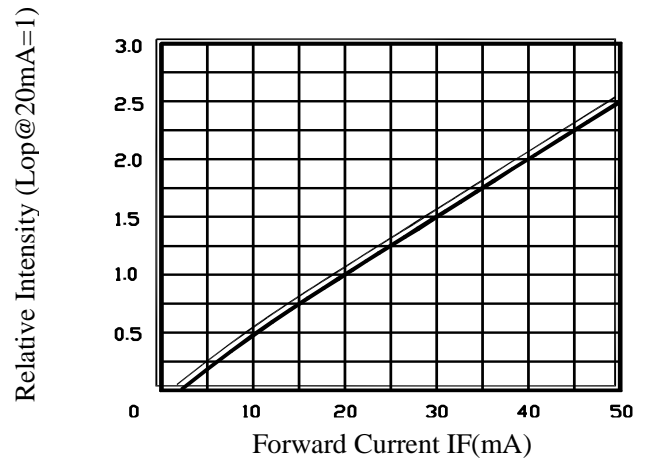
Spectral Radiance Peak @ 520nm



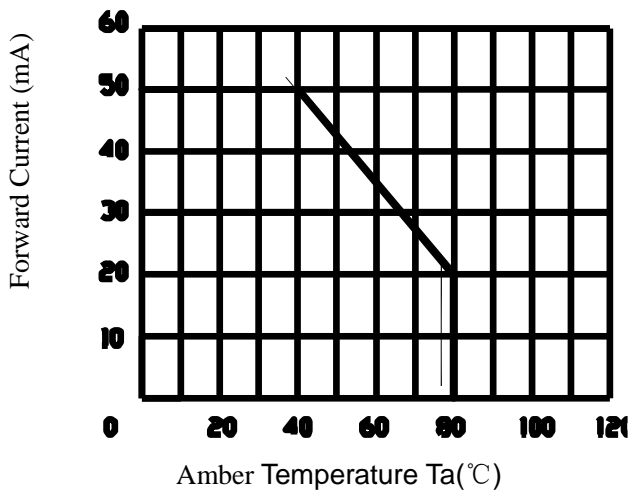
Forward Current vs Forward



Relative Luminous Intensity Vs Forward current



Operating Current & Ambient Temperature



Beam Pattern

