LL-234YD2L-004

**DATA SHEET** 

QC: ENG: Prepared By:

## **Features:**

- ♦ 2x3mm rectangular package
- ♦ General purpose leads
- ♦ Reliable and rugged

## **Package Dimensions:**

Part NO.	Chip Material	Lens Color	Source Color	
LL-234YD2L-004	GaAsP	Yellow Diffused	Yellow	

#### **Notes:**

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25mm(.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.

Part No.	LL-234YD2L-004	Spec No.	S/N-02100227D	Page	2 <b>of</b> 4
----------	----------------	----------	---------------	------	---------------

### **Absolute Maximum Ratings at Ta=25**

Parameter	MAX.	Unit		
Power Dissipation	100	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA		
Continuous Forward Current	35	mA		
Derating Linear From 50	0.4	mA/		
Reverse Voltage	5	V		
Operating Temperature Range	-40 to +80			
Storage Temperature Range	-40 to +80			
Lead Soldering Temperature [4mm(.157") From Body]	260 for 5 Seconds			

## **Electrical Optical Characteristics at Ta=25**

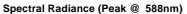
Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition	
Luminous Intensity	I <sub>V</sub>	7	15	30	mcd	I <sub>f</sub> =20mA (Note 1)	
Viewing Angle	2 1/2	120	130	140	Deg	(Note 2)	
Peak Emission Wavelength	р	583	588	593	nm	I =20mA	
Dominant Wavelength	d	585	590	595	nm	I <sub>f</sub> =20mA (Note 3)	
Spectral Line Half-Width		30	35	40	nm	I <sub>f</sub> =20mA	
Forward Voltage	V <sub>f</sub>	1.6	2.1	2.5	V	I <sub>f</sub> =20mA	
Reverse Current	<b>I</b> R			100	μΑ	V <sub>R</sub> =5V	

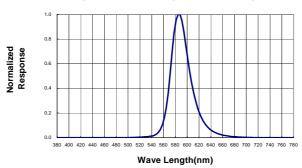
#### Notes:

- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2.  $_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength (d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

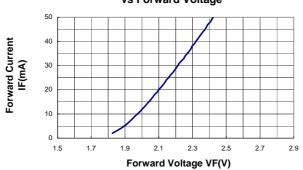
Part No.	LL-234YD2L-004	Spec No.	S/N-02100227D	Page	3 <b>of</b> 4
----------	----------------	----------	---------------	------	---------------

# Typical Electrical / Optical Characteristics Curves (25 Ambient Temperature Unless Otherwise Noted)

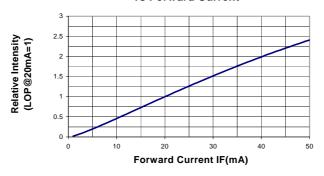




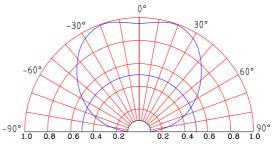
# Forward Current vs Forward Voltage



# Relative Luminous Intensity vs Forward Current



#### Beam Pattern



Relative Intensity (LOP @ MAX=1)