

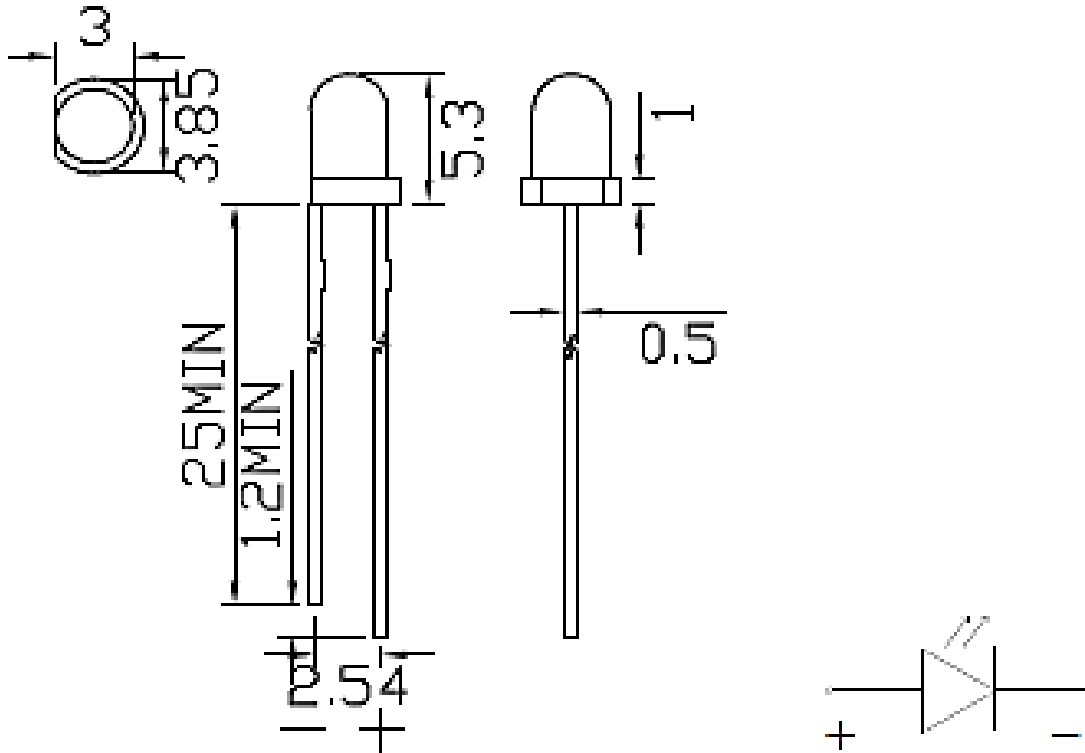


# American Opto Plus LED Corp.

## L314KYD

3mm Yellow LED Lamp

### PACKAGE OUTLINES



| ITEM          | MATERIALS       |
|---------------|-----------------|
| Dice          | AllnGaP         |
| Lens Color    | Yellow Diffused |
| Emitted Color | Yellow          |

#### Notes:

1. All dimensions are in millimeters (inches)
2. Tolerances are  $\pm 0.15\text{mm}$  unless otherwise noted.



# American Opto Plus LED Corp.

## L314KYD

### 3mm Yellow LED Lamp

#### ABSOLUTE MAXIMUM RATINGS

(Ta = 25°C)

| Parameter                                                     | Symbol           | Value               | Unit |
|---------------------------------------------------------------|------------------|---------------------|------|
| Power Dissipation                                             | P <sub>D</sub>   | 66                  | mW   |
| Forward Current                                               | I <sub>F</sub>   | 30                  | mA   |
| Peak Forward Current<br>(1/10 duty, cycle: 0.1ms Pulse Width) | I <sub>PF</sub>  | 60                  | mA   |
| Reverse Voltage                                               | V <sub>R</sub>   | 5                   | V    |
| Operating Temperature Range                                   | T <sub>OPR</sub> | -25 ~ +85           | °C   |
| Storage Humidity                                              | T <sub>SH</sub>  | 45% ~ 85%           | °F   |
| Storage Temperature Range                                     | T <sub>STG</sub> | -30 ~ +85           | °C   |
| Soldering Temperature                                         | T <sub>SOL</sub> | 260°C for 5 seconds |      |

#### OPTICAL-ELECTRICAL CHARACTERISTICS

(Ta = 25°C)

| Parameter                 | Symbol            | Test Condition       | Value |      |     | Unit |
|---------------------------|-------------------|----------------------|-------|------|-----|------|
|                           |                   |                      | Min   | Typ  | Max |      |
| Luminous Intensity        | I <sub>V</sub>    | I <sub>F</sub> =20mA | 150   | --   | 300 | mcd  |
| Forward Voltage           | V <sub>F</sub>    | I <sub>F</sub> =20mA | 1.8   | --   | 2.4 | V    |
| Suggested Forward Current | I <sub>F</sub>    | I <sub>F</sub> =20mA | 3     | 5~10 | 20  | mA   |
| Reverse current           | I <sub>R</sub>    | V <sub>R</sub> =5V   | --    | --   | 10  | μA   |
| Dominant Wavelength       | λ <sub>D</sub>    | I <sub>F</sub> =20mA | 587   | --   | 593 | nm   |
| Viewing Angle             | 2θ <sub>1/2</sub> | I <sub>F</sub> =20mA | --    | 40   | --  | deg  |

When using LEDs in circuits, it is recommended to limit the forward current to 5~10 mA, ≤20 mA.



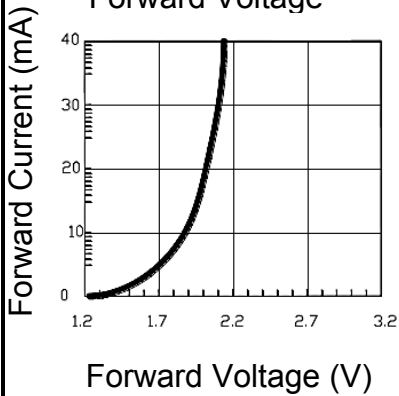
# American Opto Plus LED Corp.

## L314KYD

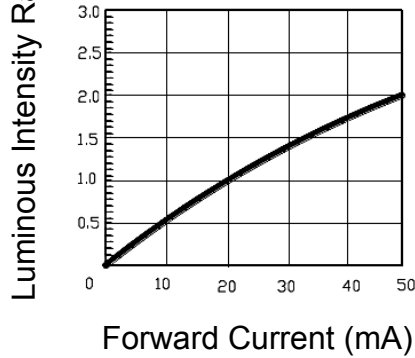
### 3mm Yellow LED Lamp

#### OPTICAL CHARACTERISTIC CURVES

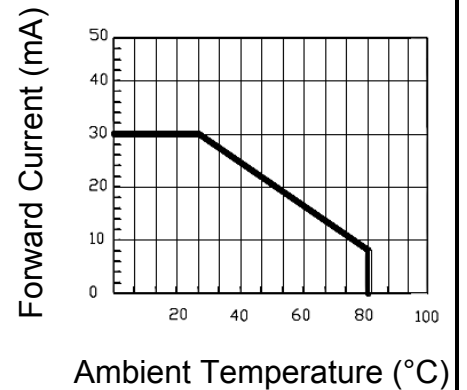
Forward Current vs.  
Forward Voltage



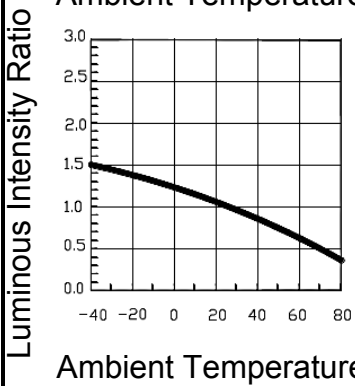
Forward Current vs.  
Relative Luminous Intensity



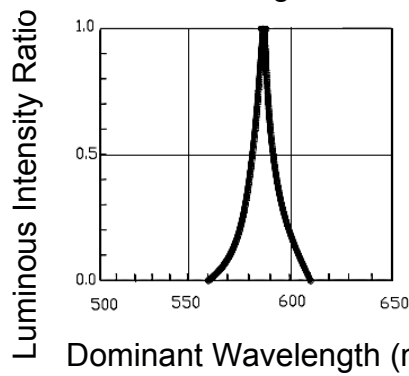
Forward Current vs.  
Ambient Temperature



Relative Luminous Intensity vs.  
Ambient Temperature



Relative Luminous Intensity vs.  
Main Wavelength



Radiation Diagram

