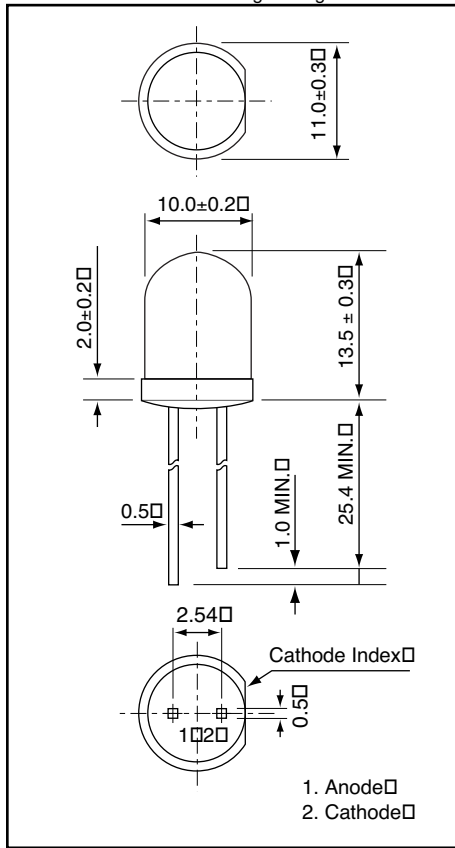




Weight: 1.0g Unit: mm



# AND190HOP

## InGaAlP High Brightness Orange Light Emission

### T-3 Package (10 mm)

#### Features

- New emission material (InGaAlP) orange LED
- Peak wavelength ( $\lambda_p = 620$  nm) high bright emission
- All plastic mold type, clear colorless lens
- Low drive current, (forward current = 1 to 20 mA)
- Excellent On-Off contrast ratio
- Fast response time, capable of pulse operation
- High power luminous intensity
- Suitable for Outdoor Message Signboards, Automotive use.
- **RoHS Compliant**

#### Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Forward Current	$I_F$	50	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	125	mW
Operating Temperature Range	$T_{Opr}$	-40 to 85	$^\circ\text{C}$

#### Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Storage Temperature Range	$T_{Stg}$	-40 to 100	$^\circ\text{C}$

#### Electro-Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F = 20$ mA	–	2.0	2.4	V
Reverse Current	$I_R$	$V_R = 5$ V	–	–	10	$\mu\text{A}$
Luminous Intensity	$I_V$	$I_F = 20$ mA	4,000	6,000	–	mcd
Peak Emission Wavelength	$\lambda_p$	$I_F = 20$ mA	–	620	–	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20$ mA	–	18	–	nm
Dominant Wavelength	$\lambda_d$	$I_F = 20$ mA	–	615	–	nm
Full Viewing Angle	$\theta$	$I_V = 1/2$ Peak	–	6	–	degree

#### Precaution

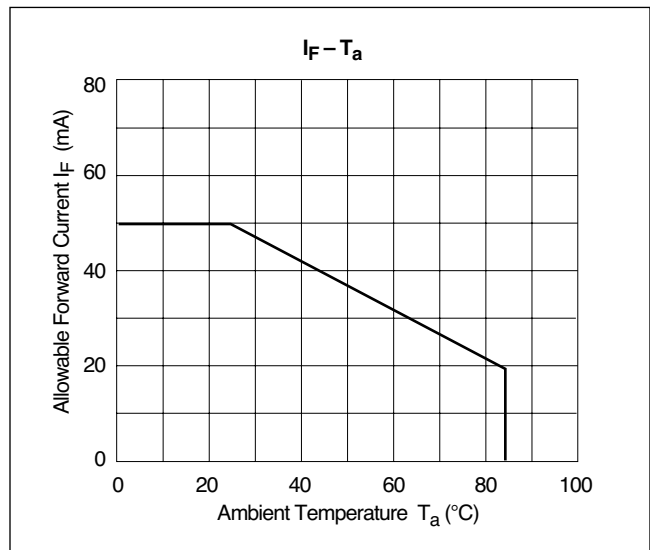
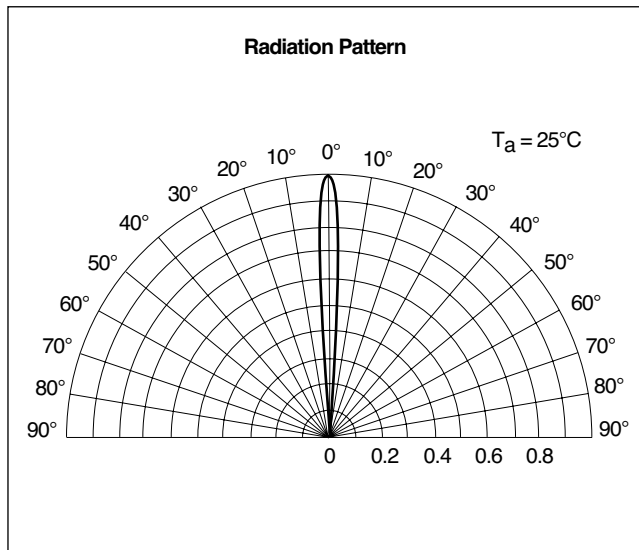
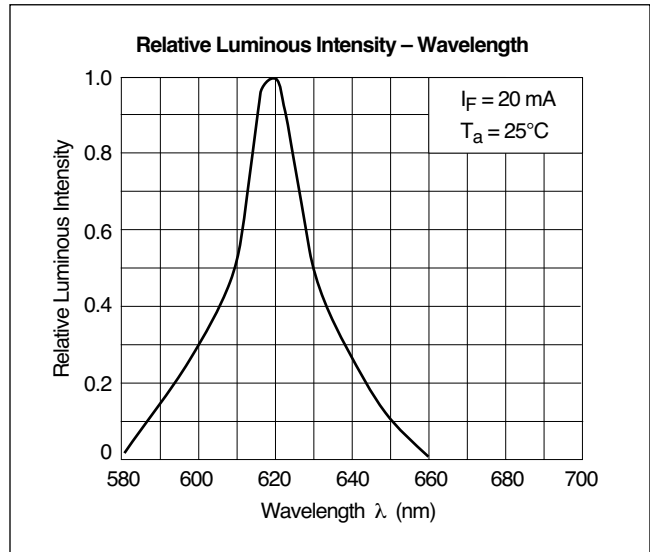
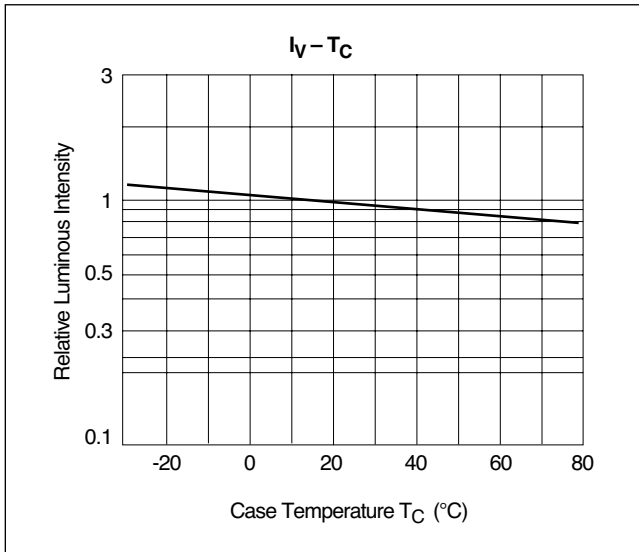
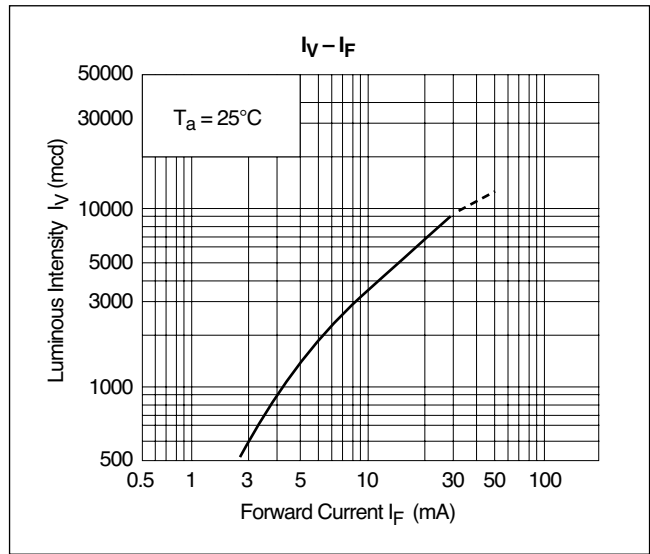
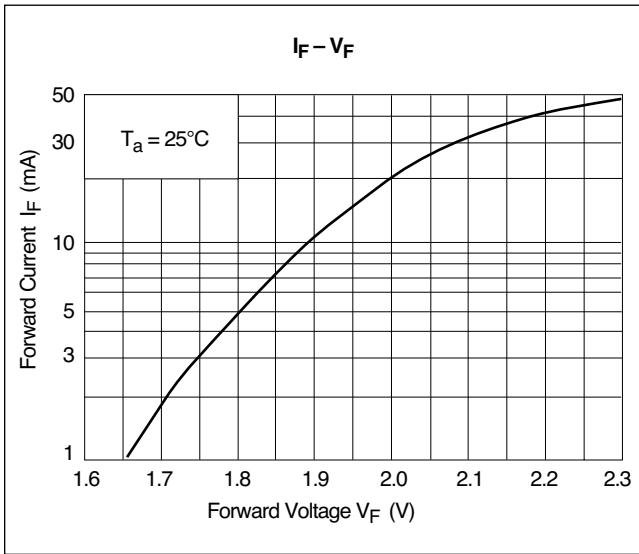
Please be careful of the following:

1. Soldering temperature:  $260^\circ\text{C}$  max

Soldering time: 5 sec. max

It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

Soldering portion of lead: up to 1.6 mm from the body of the device



2. The lead can be formed up to 5 mm from the body of the device without forming stress.



**InGaAlP High Brightness Orange Light Emission**

**AND190HOP**  
**Ultra Bright LED Lamps: Type 3**

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Soldering should be performed after the lead forming.



InGaAlP High Brightness Orange Light Emission

**AND190HOP**  
Ultra Bright LED Lamps: Type 3

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