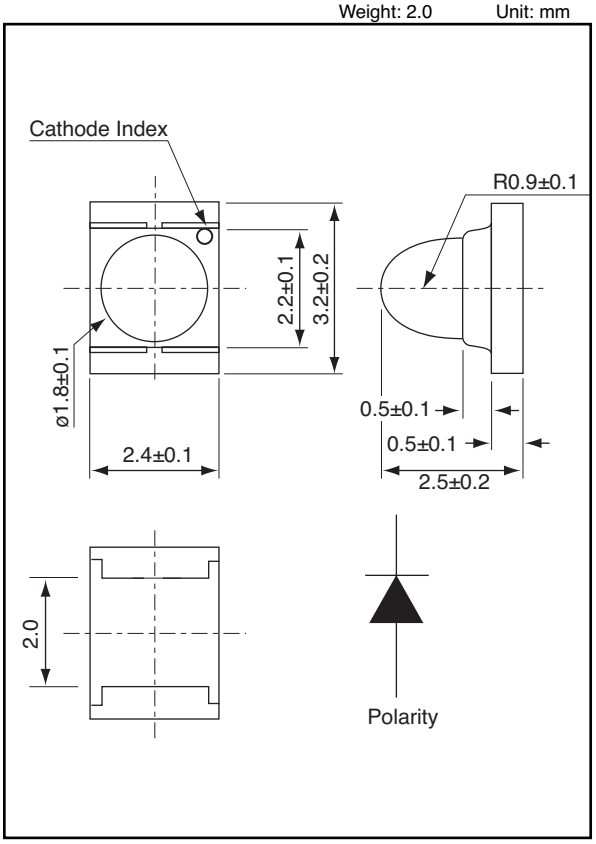
Weight: 2.0 Unit: mm




Product specifications contained herein may be changed without prior notice. It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

# AND5G

## GaP Ultra Bright Green Light Emission Surface Mount Package

### Features

- Small package size with dome lens
- 3.2 (l) x 2.4 (w) x 2.6 (h) size
- Suitable for REFLOW soldering
- Recommended Forward Current: 10 mA
- **RoHS Compliant**

**Maximum Ratings ($T_a$ = 25°C)**

| Characteristics | Symbol | Rating | Unit |
|---|---|---|---|
| Forward Current | $I_F$ | 30 | mA |
| Reverse Voltage | $V_R$ | 4 | V |
| Power Dissipation | $P_D$ | 100 | mW |
| Operating Temperature Range | $T_{Opr}$ | -30 to 85 | °C |
| Storage Temperature Range | $T_{Stg}$ | -30to 90 | °C |

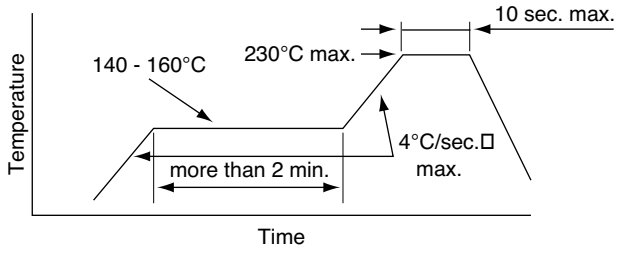
**Electro-Optical Characteristics ($T_a$ = 25°C)**

| Characteristics | Symbol | Test Condition | Minimum | Typical | Maximum | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$ = 20 mA | – | 2.1 | 2.4 | V |
| Reverse Current | $I_R$ | $V_R$ = 4 V | – | – | 100 | μA |
| Luminous Intensity | $I_V$ | $I_F$ = 20 mA | 70 | 120 | – | mcd |
| Peak Emission Wavelength | $I_P$ | $I_F$ = 20 mA | – | 570 | – | nm |
| Spectral Line Half Width | $\Delta\lambda$ | $I_F$ = 20 mA | – | 30 | – | nm |
| Dominant Wavelength | $\lambda d$ | $I_F$ = 20 mA | – | 571 | – | nm |
| Full Viewing Angle | $\theta$ | $I_V$ = 1/2 Peak | – | 30 | – | degree |

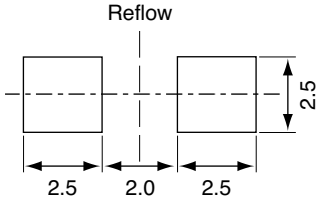
**Precaution**

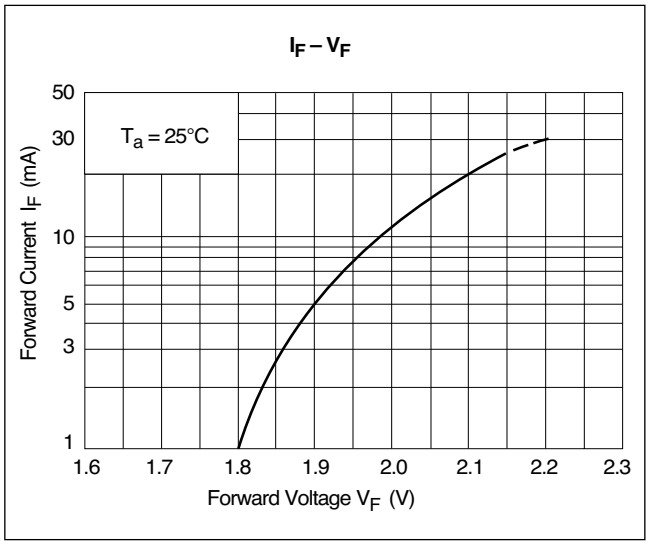
Please be careful of the following:

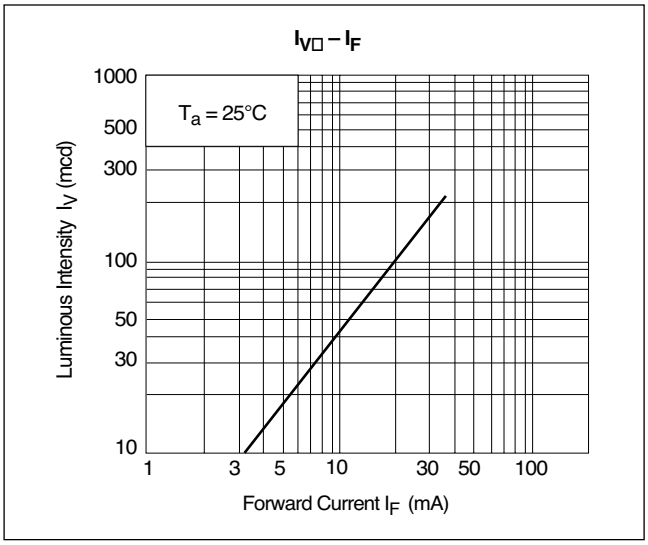
1. Manual soldering: maximum temperature of iron tip: 260°C max.
   Soldering time: within 5 sec. per solder-land
   Soldering portion of lead: up to 1.6 mm from the body of the device
2. Reflow solder: recommended condition is as follows:

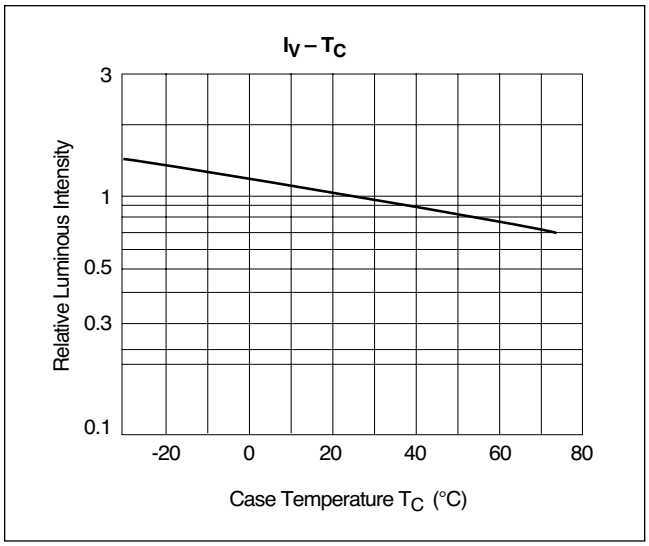


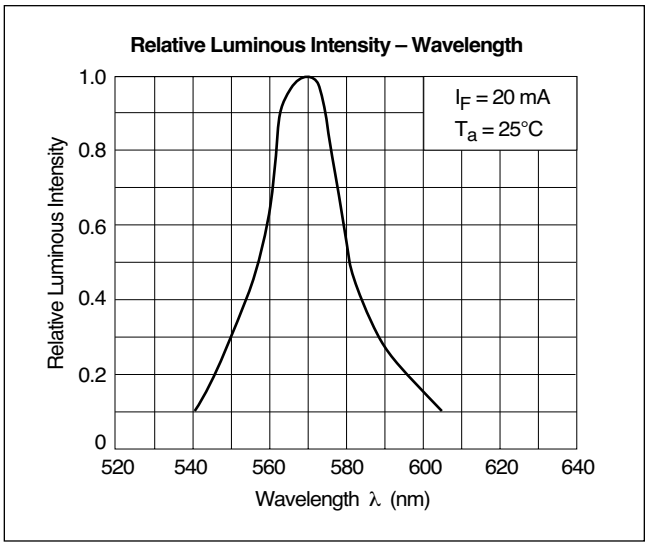

The following soldering patterns are recommended for reflow soldering

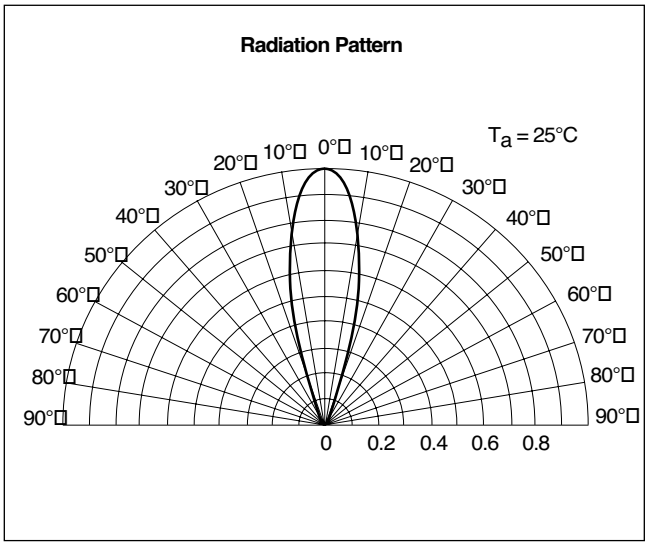


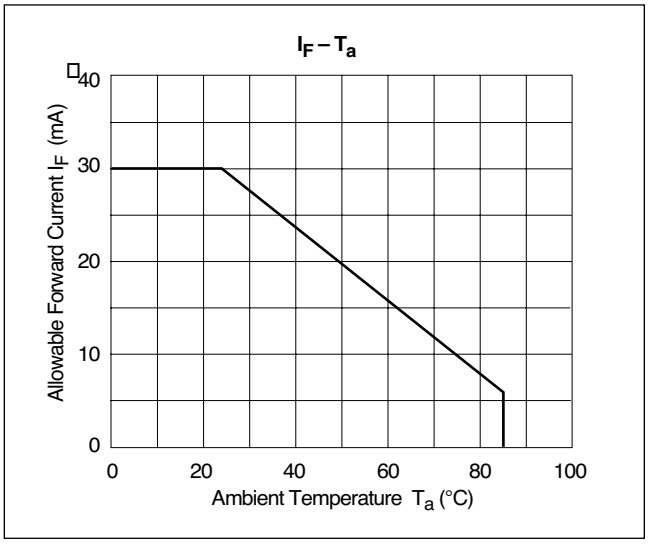

$I_F - V_F$
$T_a = 25°C$
Forward Current $I_F$ (mA)
50
30
10
5
3
1
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
Forward Voltage $V_F$ (V)


$I_V - I_F$
$T_a = 25°C$
Luminous Intensity $I_V$ (mcd)
1000
500
300
100
50
30
10
1
3
5
10
30
50
100
Forward Current $I_F$ (mA)


$I_V - T_C$
Relative Luminous Intensity
3
1
0.5
0.3
0.1
-20
0
20
40
60
80
Case Temperature $T_C$ (°C)


Relative Luminous Intensity – Wavelength
$I_F = 20$ mA
$T_a = 25°C$
Relative Luminous Intensity
1.0
0.8
0.6
0.4
0.2
0
520
540
560
580
600
620
640
Wavelength λ (nm)


Radiation Pattern
$T_a = 25°C$
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
0
0.2
0.4
0.6
0.8


$I_F - T_a$
Allowable Forward Current $I_F$ (mA)
40
30
20
10
0
0
20
40
60
80
100
Ambient Temperature $T_a$ (°C)