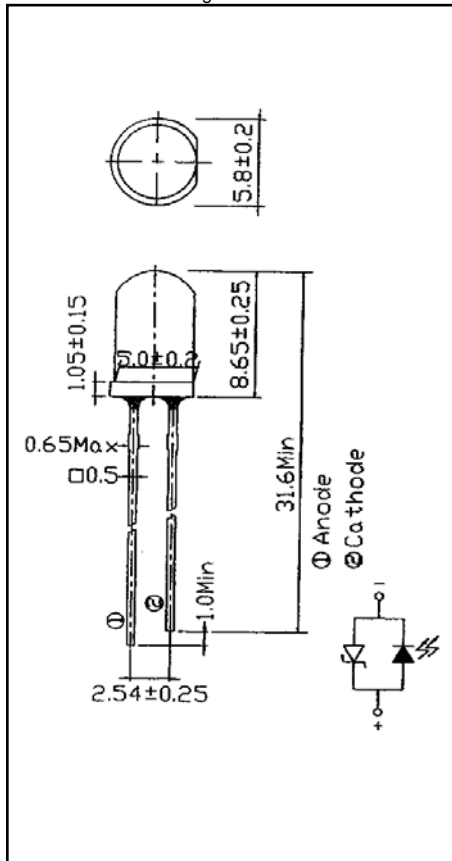




Package Dimensions Unit: mm



AND156SYP

AS AlGaInP Super Yellow Light Emission

T-1 3/4 Package (5 mm)

Features

- High efficiency
- Absorbing substrate aluminum gallium phosphide
- Viewing Angle: 30 degrees
- All plastic mold type, clear colorless lens
- Low power consumption
- ESD-withstand voltage: up to 2kV
- Pb free
- **Applications:** Outdoor Displays, Status Indicators, Backlighting, and Commercial Use

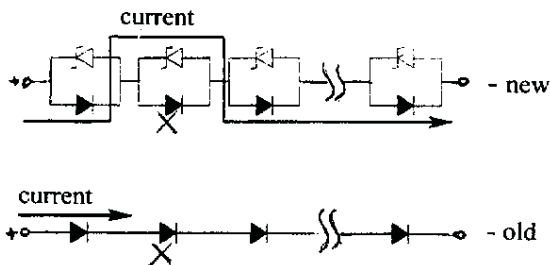
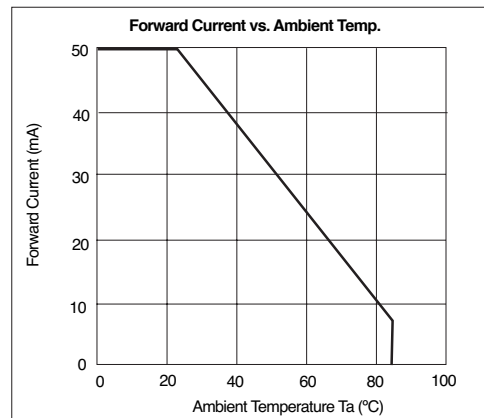
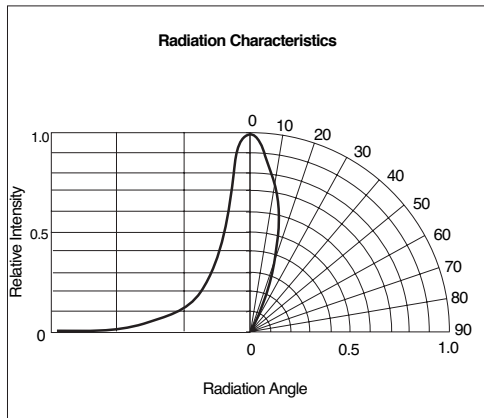
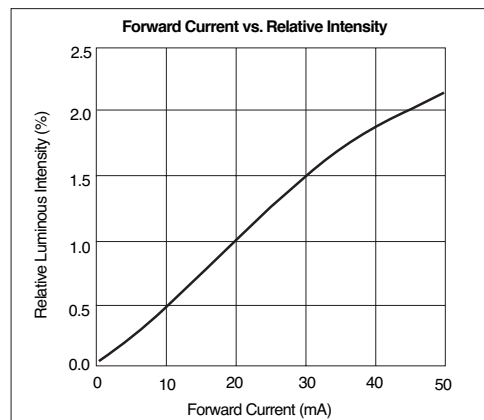
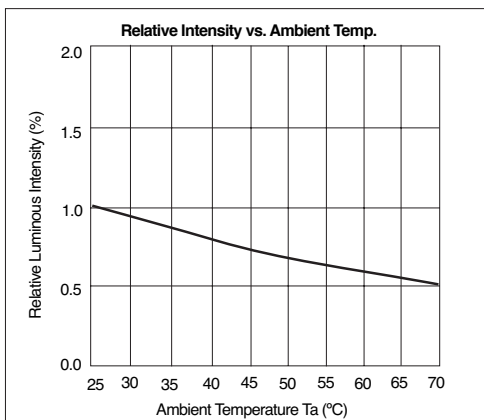
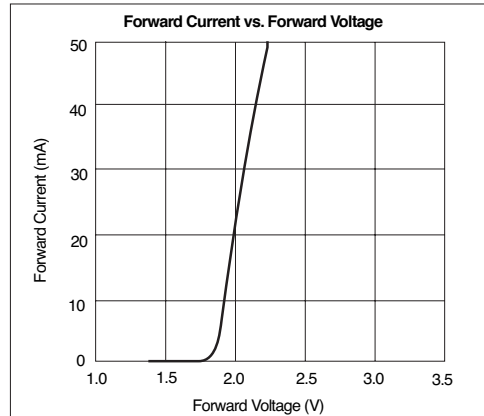
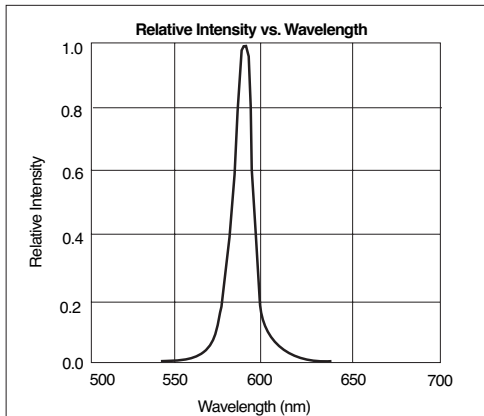
Maximum Ratings ($T_a = 25^\circ\text{C}$)

| Characteristics | Symbol | Rating | Unit |
|---|-----------|------------|------------------|
| Continuous Forward Current | I_F | 50 | mA |
| Peak Forward Current (Pulse Width < 100 μs , Duty Cycle < 1%) | I_{FP} | 100 | mA |
| Operating Temperature | T_{Opr} | -40 ~ + 85 | $^\circ\text{C}$ |
| Storage Temperature | T_{Stg} | -40 ~ +100 | $^\circ\text{C}$ |
| Soldering Temperature (Time < 5 seconds) | T_{Sol} | 260 | $^\circ\text{C}$ |
| Power Dissipation | P_D | 115 | mW |
| Zener Reverse Current | I_Z | 100 | mA |
| Electrostatic Discharge | ESD | 4000 | V |

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 | 2.6 | V |
| Zener Reverse Voltage | V_Z | $I_Z = 5$ mA | – | – | 3.0 | V |
| Luminous Intensity | I_V | $I_F = 20$ mA | 4500 | 6200 | 7150 | mcd |
| Peak Emission Wavelength | λ_P | $I_F = 20$ mA | – | 591 | – | nm |
| Dominant Wavelength | λ_d | $I_F = 20$ mA | – | 589 | – | nm |
| Spectrum Radiation Bandwidth | $\Delta\lambda$ | $I_F = 20$ mA | – | 15 | – | nm |
| Full Viewing Angle | $2\theta_{1/2}$ | $I_F = 20$ mA | – | 30 | – | degree |

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.



When the LEDs are connected using serial circuit, if either one of the LEDs does not light up, then current will not flow causing the other LEDs to not light up. In the new design, the LEDs are in parallel with the zener diodes. If either one of the LEDs does not light up, current can still flow through causing the others to light up.