

LP377AYL1-70G

Features

- Low Profile
- 4 Pin Plastic Package
- Water Clear Lens
- High Flux Output
- High Current Operation

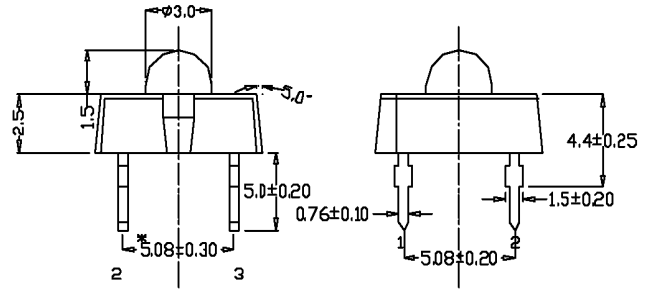
Applications

- Automotive Interior Exterior Lighting
- Rail Signals
- Traffic Control Devices
- Channel Letters
- Strip Lighting
- Architectural Lighting



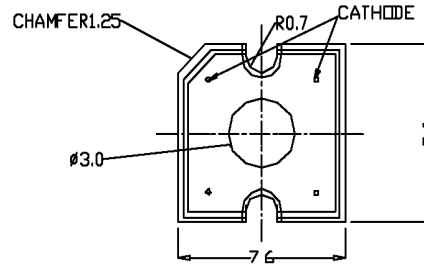
ATTENTION

OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES



2.3 ANODE

1.4: CATHODE



NOTES:

- All Dimensions are in mm. Tolerance is ± 0.25 mm.
- An Epoxy Meniscus may extend about 1.5mm down the leads.
- Burr around bottom of epoxy may be 0.5mm Max.

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

| Characteristic | Symbol | Max. | Unit |
|-----------------------|-----------|----------------|------------------|
| Forward Current | I_F | 70 | mA |
| Reverse Voltage | V_R | 5 | V |
| Power Dissipation | P_D | 210.00 | mW |
| Operating Temperature | T_{opr} | -40 ~ +100 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40 ~ +100 | $^\circ\text{C}$ |
| Soldering Temperature | T_{sol} | 260 | $^\circ\text{C}$ |
| Soldering Time | - | for 5 sec. max | - |

Opto-Electrical Characteristics ($T_a=25^\circ\text{C}$)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------|-----------------|-------------------|---------|------------|------|---------------|
| Forward Voltage | V_F | $I_F=70\text{mA}$ | - | 2.50 | 3.00 | V |
| Reverse Current | I_R | $V_R=5\text{V}$ | - | - | 100 | μA |
| Luminous Flux | Φ | $I_F=70\text{mA}$ | 3000.00 | 5000.00 | - | mlm |
| Viewing Angle | $2\theta^{1/2}$ | - | - | 70° | - | deg. |
| Peak Wavelength | λ_p | $I_F=70\text{mA}$ | - | 591 | - | nm |
| Dominant Wavelength | λ_d | $I_F=70\text{mA}$ | - | 589 | - | nm |
| Spectral Line Half Width | $\Delta\lambda$ | $I_F=70\text{mA}$ | - | 20 | - | nm |

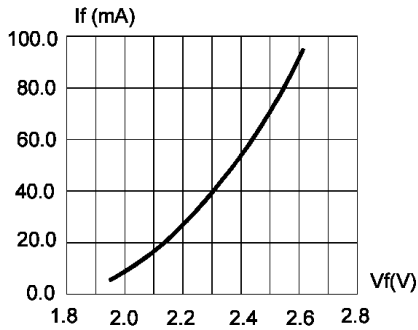


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

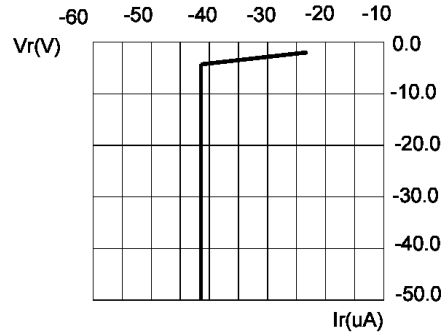


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

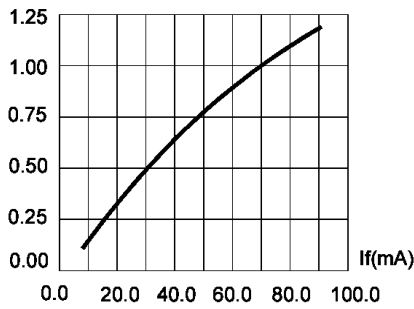


FIG.3 RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT.

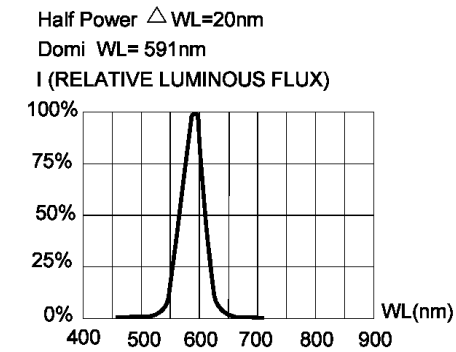


FIG.4 RELATIVE LUMINOUS FLUX VS. WAVELENGTH.

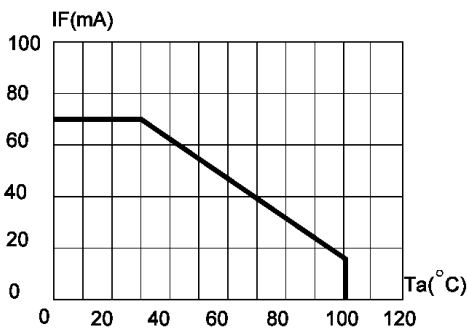


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE (Tjmax=120°C)

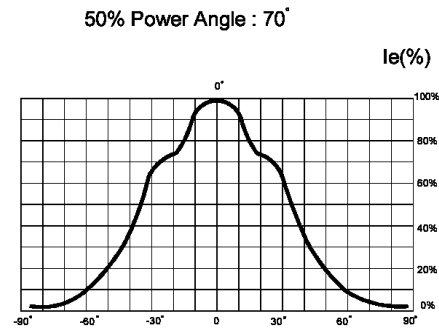


FIG.6 FAR FIELD PATTERN