

LP377THR1-A0G



ATTENTION

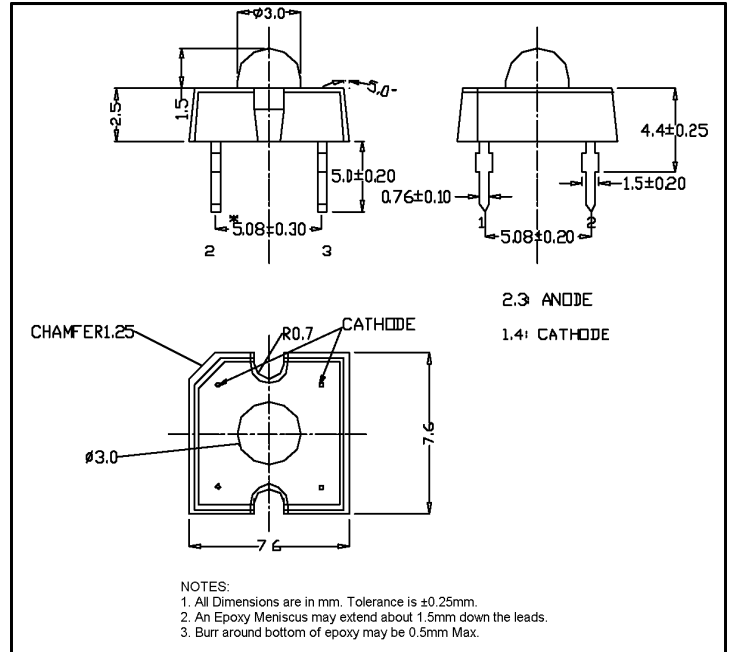
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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



Maximum Ratings (Ta=25°C)

| Characteristic | Symbol | Max. | Unit |
|-----------------------|------------------|----------------|------|
| Forward Current | I _F | 70 | mA |
| Reverse Voltage | V _R | 5.00 | V |
| Power Dissipation | P _D | 220.00 | mW |
| Operating Temperature | T _{opr} | -40 ~ +100 | °C |
| Storage Temperature | T _{stg} | -40 ~ +100 | °C |
| Soldering Temperature | T _{sol} | 260 | °C |
| Soldering Time | - | for 5 sec. max | - |

Opto-Electrical Characteristics (Ta=25°C)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------|-------------------|----------------------|---------|---------|------|------|
| Forward Voltage | V _F | I _F =70mA | -- | 2.60 | 3.20 | V |
| Reverse Current | I _R | V _R =5V | - | - | 100 | μA |
| Luminous Flux | Φ | I _F =70mA | 3000.00 | 4000.00 | - | mlm |
| Viewing Angle | 2θ ^{1/2} | - | - | 100° | - | deg. |
| Peak Wavelength | λ _p | I _F =70mA | - | 639 | - | nm |
| Dominant Wavelength | λ _d | I _F =70mA | - | 628 | - | nm |
| Spectral Line Half Width | Δλ | I _F =70mA | - | 23 | - | nm |

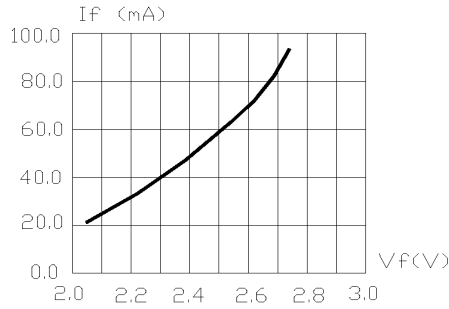


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

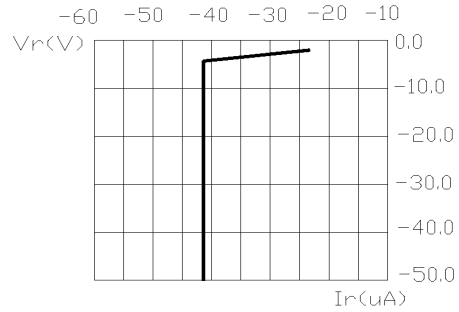


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

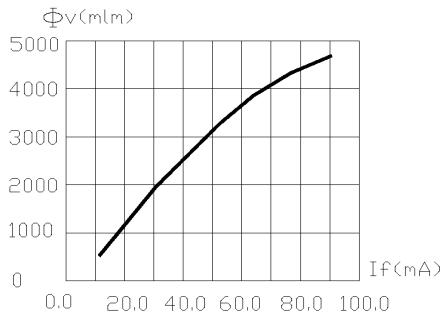


FIG.3 RELATIVE FLUX VS. FORWARD CURRENT.

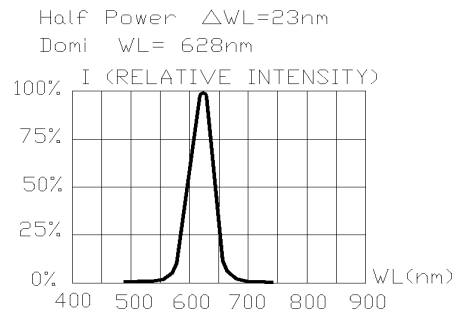


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

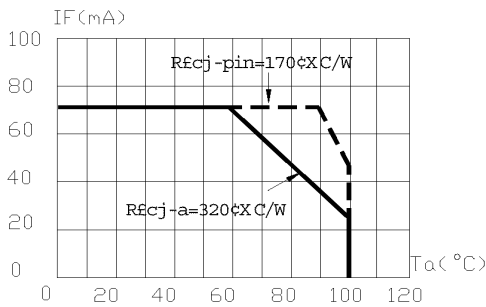


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=120^{\circ}C$

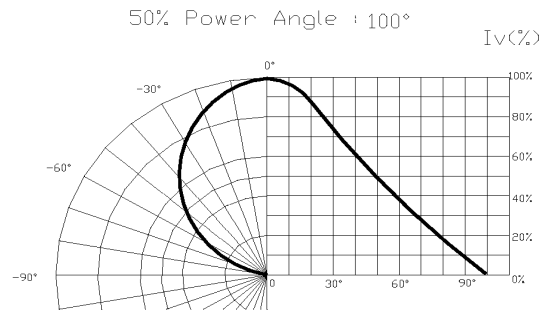


FIG.6 SPATIAL DISTRIBUTION.

1. Cathode PAD Area ($0.18 \times 0.18 \times 2 \text{inch}^2$)
2. Height above nominal seating plane in inches (0.3inch)