

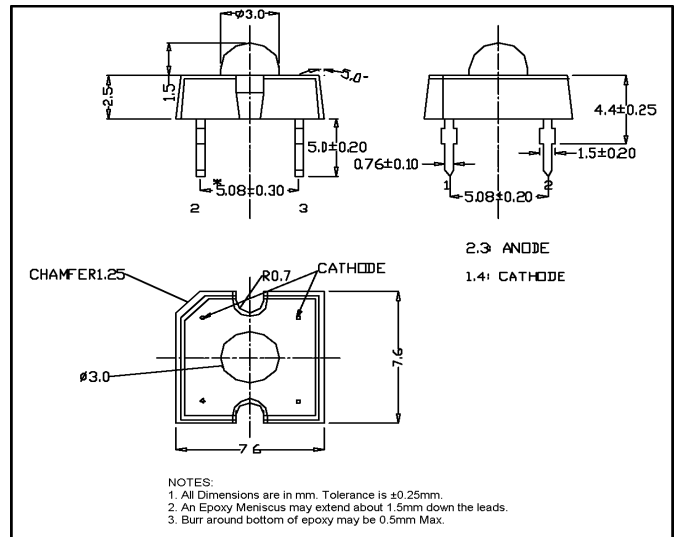
LP377THR1-40G

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	150.00	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	2.20	2.60	3.00	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}	-	-	40°	-	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

LP377THR1-40G Graphs

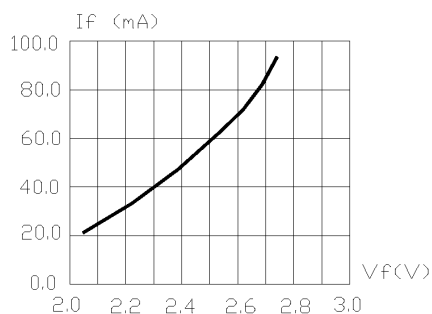


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

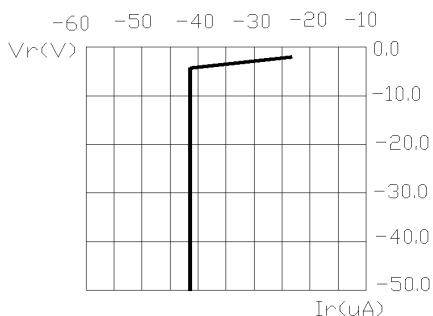


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

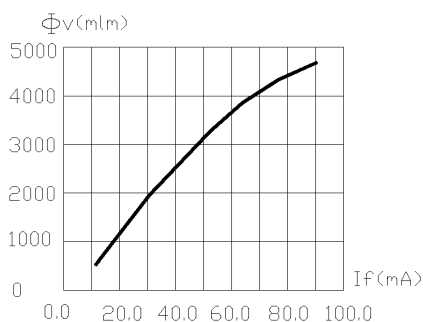


FIG.3 RELATIVE FLUX VS. FORWARD CURRENT.

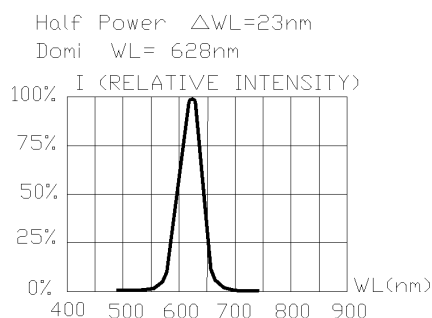


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

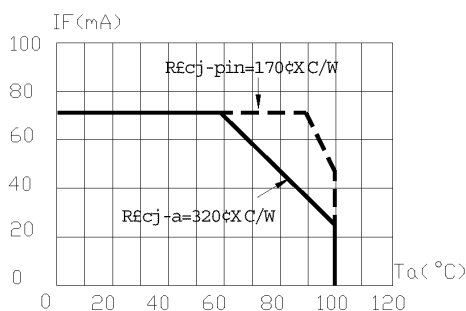


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=120^{\circ}\text{C}$

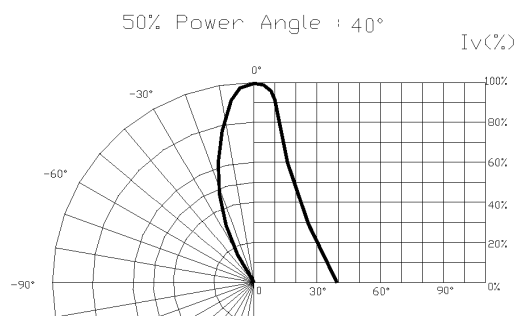


FIG.6 SPATIAL DISTRIBUTION.

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