

## LP377TYL1-40G

### Features

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

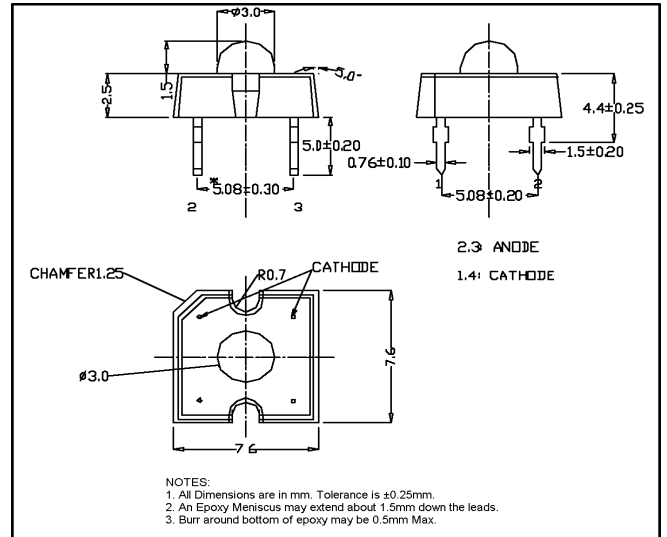
### Applications

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



## ATTENTION

OBSERVE PRECAUTIONS  
ELECTROSTATIC  
SENSITIVE DEVICES



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

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	$^\circ\text{C}$
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	$V_F$	$I_F=70\text{mA}$	2.20	2.60	3.00	V
Reverse Current	$I_R$	$V_R=5\text{V}$	-	-	100	$\mu\text{A}$
Luminous Flux	$\Phi$	$I_F=70\text{mA}$	2000.00	3200.00	-	mlm
Viewing Angle	$2\theta^{1/2}$	-	-	40 $^\circ$	-	deg.
Peak Wavelength	$\lambda_p$	$I_F=70\text{mA}$	-	594	-	nm
Dominant Wavelength	$\lambda_d$	$I_F=70\text{mA}$	-	591	-	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F=70\text{mA}$	-	20	-	nm

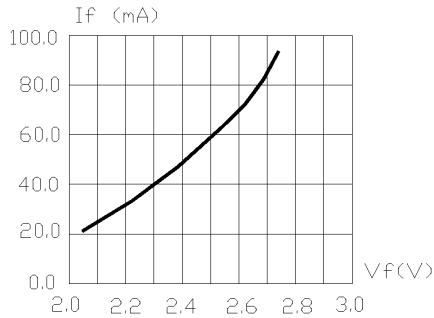


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

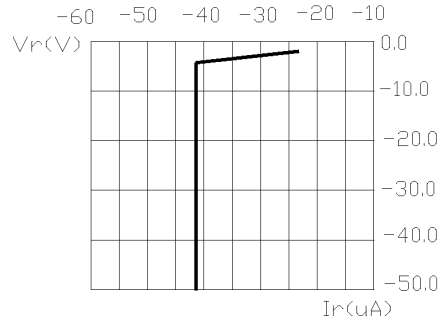


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

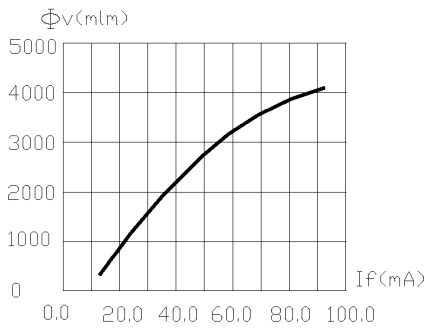


FIG.3 RELATIVE FLUX VS. FORWARD CURRENT.

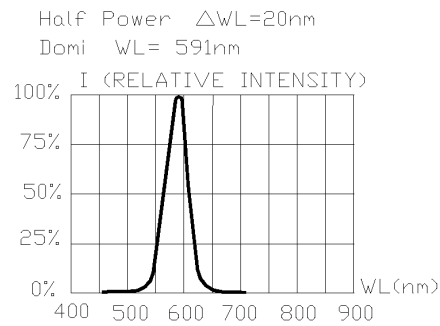


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

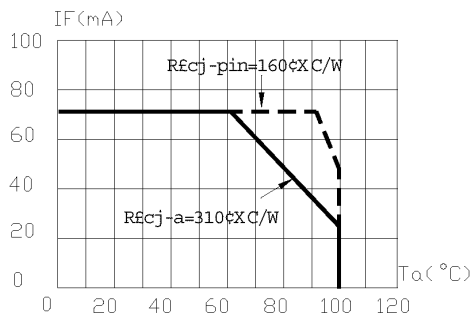


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON  $T_{jmax}=120^{\circ}C$

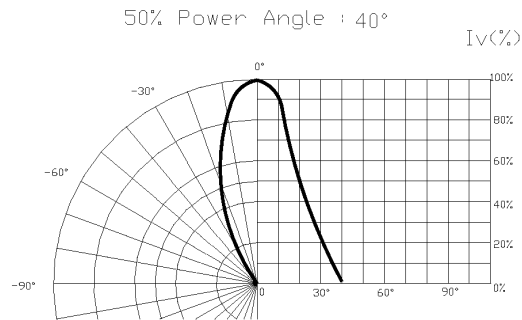


FIG.6 SPATIAL DISTRIBUTION.

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