

L590-09

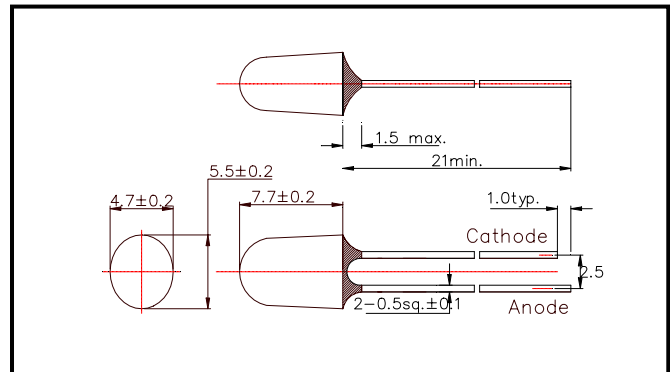
Oval type super bright yellow color LED lamp

L590-09 is an InGaAlP LED mounted on a lead frame with a clear epoxy oval lens and 4cd typ. On forward bias it emits a band of visible light, which peaks at 595nm.

◆ Specifications

- | | |
|---------------------|----------------------|
| 1) Product Name | Oval type Yellow LED |
| 2) Type No. | L590-09 |
| 3) Chip | |
| (1) Chip Material | InGaAlP |
| (2) Peak Wavelength | 595nm typ. |
| 4) Package | |
| (1) Type | Φ5mm clear oval lens |
| (2) Resin Material | Epoxy Resin |
| (3) Lead Frame | Soldered(Lead Free) |

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	130	mW	T _a =25°C
Forward Current	I _F	50	mA	T _a =25°C
Pulsed Forward Current	I _{FP}	300	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Junction Temperature	T _J	100	°C	
Thermal Resistance	R _{thjp}	330	K/W	
Operating Temperature	T _{OPR}	-30 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		2.15	2.40	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =20mA	2.5	4.0		mW
Radiant Intensity	I _E	I _F =20mA		7.5		mW/sr
Brightness	I _V	I _F =20mA	2500	4000		mcd
Peak Wavelength	λ _P	I _F =20mA	590	595	605	nm
Half Width	Δλ	I _F =20mA		15		nm
Viewing Half Angle	Long	θ _{1/2}	I _F =20mA		±28	deg.
	Short				±16	

‡Brightness is measured by Tektronix J-16.

‡Total Radiated Power is measured by Photodyne #500