L590-09

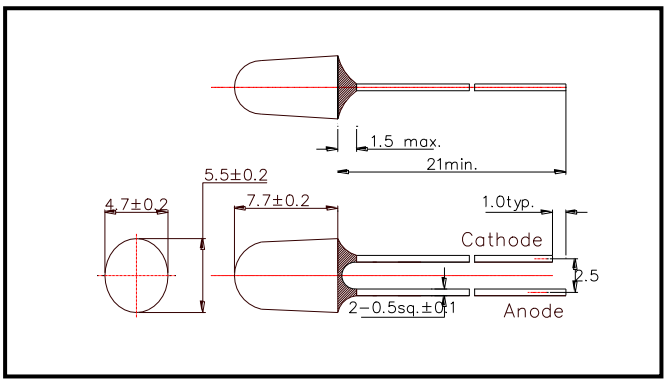
Oval type super bright yellow color LED lamp

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	Ta=25°C
Forward Current	I_F	50	mA	Ta=25°C
Pulsed Forward Current	I_{FP}	300	mA	Ta=25°C
Reverse Voltage	V_R	5	V	Ta=25°C
Junction Temperature	T_J	100	°C	
Thermal Resistance	Rthjp	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		$\Delta\lambda$	I_F=20mA		15		nm
Viewing Half Angle	Long	$\theta_{1/2}$	I_F=20mA		±28		deg.
	Short				±16		

‡Brightness is measured byTektronix J-16.
‡Total Radiated Power is measured by Photodyne #500

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