

L890-40D32-I stem type LED with glass ball lens

L890-40D32-I is AlGaAs LED mounted on TO-46 3pins stem with glass ball lens, and electrodes are isolated from case.

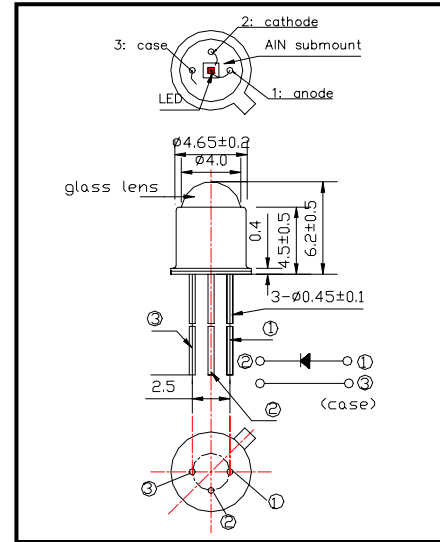
On forward bias it emits a spectral band of radiation, which peaks at 885nm.

◆ Features

- 1) High Power
- 2) High Reliability

◆ Specifications

- 1) Product Name LED Lamp
- 2) Type No. L890-40D32-I
- 3) Chip Spec.
 - (1) Material AlGaAs
 - (2) Chip dimension 400um*400um
 - (3) Peak Wavelength 885nm
- 4) Package
 - (1) Type TO-46 3pins Stem
 - (2) Lens Glass Ball Lens
 - (3) Cap Gold plated



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	150	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Thermal Resistance	R _{thja}	260	K/W	
Junction Temperature	T _j	135	°C	
Operating Temperature	T _{OPR}	-40 ~ +85	°C	
Storage Temperature	T _{STG}	-40 ~ +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

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.45	1.70	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA		9		mW
Radiant Intensity	I _E	I _F =50mA		21		mW/sr
Peak Wavelength	λ _P	I _F =50mA	875	885	895	nm
Half Width	Δλ	I _F =50mA		50		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±14		deg.
Rise Time	t _r	I _F =50mA		800		ns
Fall Time	t _f	I _F =50mA		400		ns

‡Radiated Power is measured by S3584-08

‡Radiant Intensity is measured by Tektronix J-6512.