

L890/PD010-40D54

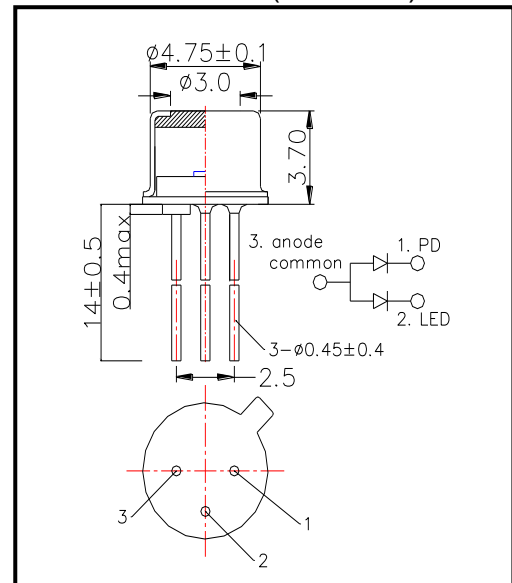
High Power LED with PD Monitor

L890/PD010-40D54 consists of an AlGaAs LED 890nm and a Si-PD mounted on TO-46 stem hermetically sealed with a glass flat can, and is designed to monitor reflected light through detector for controlling its own output power.

◆ Specifications

- 1) Product Name LED Lamp with PD Monitor
- 2) Type No. L890/PD010-40D54
- 3) Chip
 - (1) Chip Material AlGaAs and Si (PIN)
 - (2) Peak Wavelength 890nm typ.
- 4) Package
 - (1) Stem TO-46 3pin
 - (2) Lens $\Phi 5$ 3.0 Flat Glass
 - (3) Can Metal Can (Gold Plate)

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value		Unit
		890nm	PD	
Power Dissipation	PD	150	-	mW
Forward Current	IF	100	-	mA
Pulse Forward Current	IFP	500	-	mA
Reverse Voltage	VR	5	100	V
Operating Temperature	TOPR	-40 ~ +85		°C
Storage Temperature	TSTG	-40 ~ +100		°C
Soldering Temperature	TSOL	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 [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.45	1.70	V
Radiated Power	PO	IF=50mA	3.0	6.0		mW
Radiant Intensity	IE	IF=50mA	4.5	9.0		mW/sr
Peak Wavelength	λ P	IF=50mA	880	890	900	nm
Half Width	$\Delta\lambda$	IF=50mA		50		nm
Viewing Half Angle	θ 1/2	IF=50mA		\pm 40		deg.
Rise Time	tr	IF=50mA		800		ns
Fall Time	tf	IF=50mA		400		ns
Output Current	IL	VR=0V	130	260		μ A
Dark Current	ID	VR=10V			10	nA

‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2700 Condition B.

Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

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