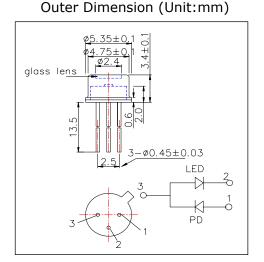
L890/PD010-40D52

Metal Can sealed PD Monitering High Power LED

This product consists of GaAlAs LED(880nm) and a Si-PD mounted on TO-18 stem hermetically sealed with a glass flat can, designed to moniter reflected light through detector for controlling its own output power.

- <Specifications>
- 1. Product Name: LED Lamp with PD Monitor
- 2. Type Number: L890/PD010-40D52
- 3. Chip:
- Chip material: GaAlAs and Si(PIN)
- Peak Wavelength: 880nm
- 4. Package:
- Stem: Φ5mm TO-18
- Can: Metal Can (Gold Plate)



Absolute Maximum Ratings[Ta=25°C]							
Device	Item	Symbol	Maximum Rated Value	Unit			
LED	Power Dissipation	PD	150	mW			
LED	Forward Current	IF	100	mA			
LED	Pulse Forward Current*	IFP	500	mA			
LED	Reverse Voltage	VR	5	V			
PD	Reverse Voltage	VR	100	V			
	Operating Temperature	TOPR	-20 ~ +85	°C			
	Storage Temperature	TSTG	-30 ~ +100	°C			
	Soldering Temperature*	TSOL	260	C°			

* Soldering condition must be completed within 3 seconds at 250 $^{\circ}\mathrm{C}$

Electro-Optical Characteristics [Ta=25°C]									
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit			
Forward Voltage	VF	IF=50mA		1.45	1.70	V			
Reverse Current	IR	VR=5V			10	uA			
Total Radiated Power*	PO	IF=50mA	2.5	5.0		mW			
Radiant Intensity	IE	IF=50mA	2.0	4.0		mW/sr			
Peak Wavelength	λP	IF=50mA	865	880	895	nm			
Half Width	Δλ	IF=50mA		50		nm			
Viewing Half Angle	θ1/2	IF=50mA		±40		deg			
Rise Time	tr	IF=50mA		800		ns			
Fall Time	tf	IF=50mA		400		ns			
Output Current	IL	VR=0V	130	260		uA			
Dark Current	ID	VR=10V			10	nA			

* Measured by Photodyne #500

