

L810/PD010-40D52

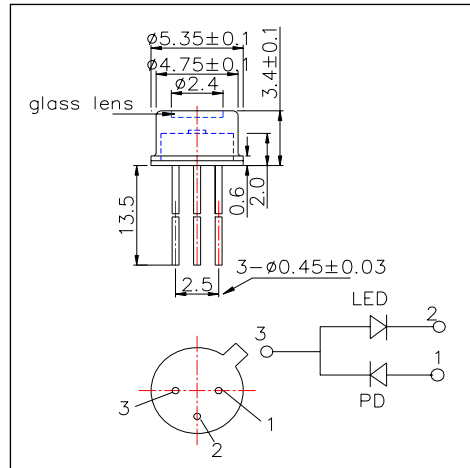
Metal Can sealed PD Monitoring High Power LED

This product consists of GaAlAs LED(810nm) and a Si-PD mounted on TO-18 stem hermetically sealed with a glass flat can, designed to monitor reflected light through detector for controlling its own output power.

<Specifications>

1. Product Name: LED Lamp with PD Monitor
2. Type Number: L810/PD010-40D52
3. Chip:
 - Chip material: GaAlAs and Si(PIN)
 - Peak Wavelength: 810nm
4. Package:
 - Stem: TO-18
 - Lens: Φ5mm 2.4 Flat Glass
 - Can: Metal Can (Gold Plate)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]				
Device	Item	Symbol	Maximum Rated Value	Unit
LED	Power Dissipation	PD	170	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	-30 ~ +85	°C
	Storage Temperature	TSTG	-30 ~ +100	°C
	Soldering Temperature**	TSOL	260	°C

* Duty=1% and tw=10μs

** Soldering condition must be completed within 3 seconds at 260°C

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.70	2.00	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	3.0	6.0		mW
Radiant Intensity**	IE	IF=50mA	2.5	5.0		mW/sr
Peak Wavelength	λP	IF=50mA	790	810	830	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±55		deg
Rise Time	tr	IF=50mA		60		ns
Fall Time	tf	IF=50mA		40		ns
Output Current	IL	VR=0V	125	250		uA
Dark Current	ID	VR=10V			10	nA

* Measured by Photodyne #500

** Measured by Tektronix J-6512

