L780/PD010-40D52

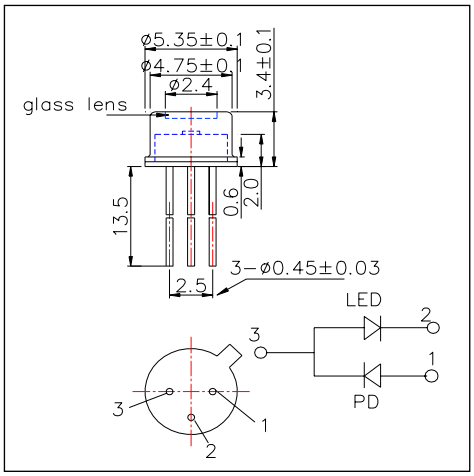
High Power LED with PD Monitor

This product consists of GaAlAs LED(780nm) 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: L780/PD010-40D52
3. Chip:
   - Chip material: GaAlAs and Si(PIN)
   - Peak Wavelength: 780nm
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℃]				
Device	Item	Symbol	Maximum Rated Value	Unit
LED	Power Dissipation	PD	200	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	℃
	Storage Temperature	TSTG	-30 ~ +100	℃
	Soldering Temperature**	TSOL	260	℃

* Duty=1% and tw=10μs
** Soldering condition must be completed within 3 seonds at 260℃

Electro-Optical Characteristics [Ta=25℃]						
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	765	780	795	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	250	500		uA
Dark Current	ID	VR=10V			10	nA

* Measured by Photodyne #500
** Measured by Tektronix J-6512

RoHS Compliant

Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com