

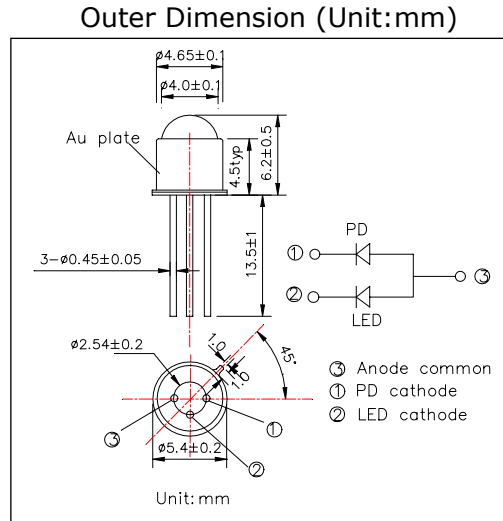
## L780/PD010-40D32A

### 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 ball lens can, designed to monitor reflected light through detector for controlling its own output power at anode common.

**<Specifications>**

1. Product Name: LED Lamp with PD Monitor
2. Type Number: L780/PD010-40D32A
3. Chip:
  - Chip material: GaAlAs and Si(PIN)
  - Peak Wavelength: 780nm
4. Package:
  - Stem: TO-18
  - Lens: Φ5mm Ball Glass
  - Can: Metal Can (Gold Plate)



Absolute Maximum Ratings[Ta=25°C]				
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	°C
	Storage Temperature	TSTG	-30 ~ +100	°C
	Soldering Temperature**	TSOL	265	°C

\* Duty=1% and tw=10μs

\*\* Soldering condition must be completed within 3 seconds at 265°C

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.80	2.00	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA		12.0		mW
Radiant Intensity**	IE	IF=50mA		40.0		mW/sr
Peak Wavelength	λP	IF=50mA	770	780	790	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±15		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		80		ns
Output Current	IL	VR=0V		300		uA
Dark Current	ID	VR=10V			10	nA

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

