

# L1300/1450/1550/PD-35B32

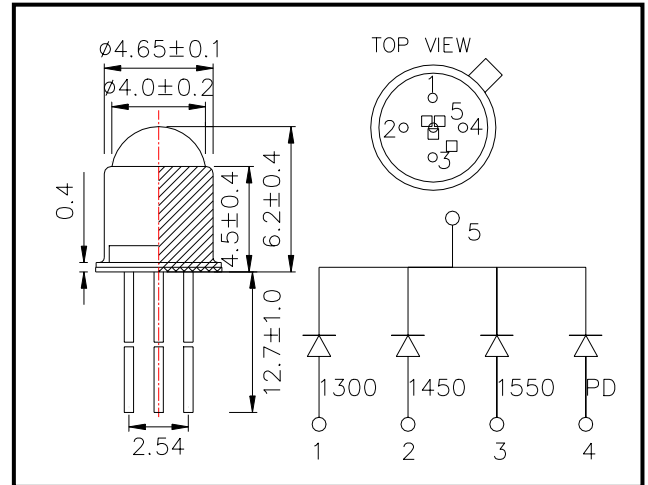
## multi-wavelength LED

L1300/1450/1550/PD-B32 consists of an InGaAs and an InGaAs PD mounted on TO-18 stem with a spherical glass lens, and is designed to monitor reflected light through detector for controlling its own output power.

### ◆ Specifications

- |                     |                           |
|---------------------|---------------------------|
| 1) Product Name     | Multi-wavelength LED Lamp |
| 2) Type No.         | L1300/1450/1550/PD-35B32  |
| 3) Chip             |                           |
| (1) Chip material   | InGaAs(LED, PD)           |
| (2) Peak wavelength | 1300, 1450 and 1550nm     |
| 4) Package          |                           |
| (1) Stem            | TO-18 5pin type           |
| (2) Lens            | Φ5mm spherical glass      |

◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings/ per each one chip [Ta=25°C]

Device	Item	Symbol	Maximum Rated Value			Unit
			1300	1450	1550	
LED	Power Dissipation	PD	120	120	120	mW
LED	Forward Current	IF	100	100	100	mA
LED	Pulse Forward Current	IF	1000	1000	1000	mA
LED	Reverse Voltage	VR	5			V
PD	Reverse Voltage	VR	10			V
TOPR	Operating Temperature	TOPR	-20 ~ +80			°C
TSTG	Storage Temperature	TSTG	-30 ~ +100			°C
TSOL	Soldering Temperature	TSOL	240			°C

‡Soldering condition: Soldering condition must be completed within 3 seconds at 240°C and is allowed in the area apart 3mm from the bottom of the lamp.

### ◆ Electro-Optical Characteristics/ per each one chip [Ta=25°C]

Device	Item	Wavelength	Condition	Minimum	Typical	Maximum	Unit		
LED	Forward Voltage	1300	IF=20mA		0.8	1.3	V		
		1450							
		1550							
	Reverse Current		IF=20mA	VR=5V			10	uA	
		Total Radiated Power							
		Peak Wavelength							
	PD	Half Width	1300	IF=20mA		75		nm	
			1450						
			1550						
Output Current		1300	IF=20mA VR=0V			45		uA	
		1450							
		1550							
Dark Current		VR=10V				100	nA		

‡Total Radiated Power is measured by Photodyne #500

‡Radiated Power of NIR LED are measured by Ando Optical Multi Meter AQ2140 & AQ2742