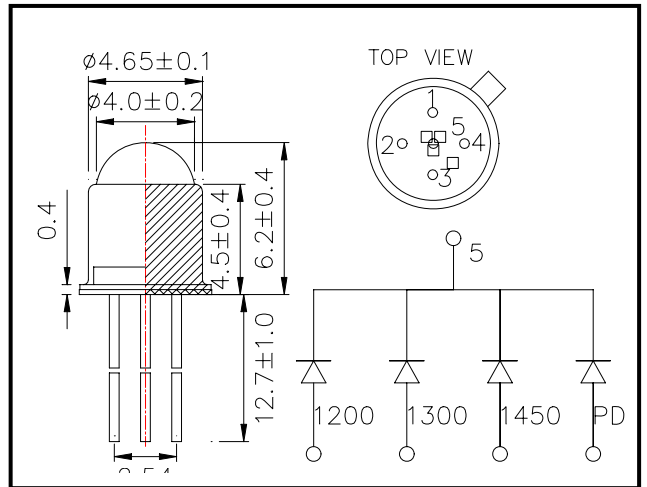


L1200/1300/1450/PD-35B32 multi-wavelength LED

L1200/1300/1450/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.

◆ Outer dimension (Unit: mm)



◆ Specifications

- 1) Product Name Multi-wavelength LED Lamp
- 2) Type No. L1200/1300/1450/PD-35B32
- 3) Chip
 - (1) Chip material InGaAs(LED, PD)
 - (2) Peak wavelength 1200, 1300 and 1450nm
- 4) Package
 - (1) Stem TO-18 5pin type
 - (2) Lens Φ5mm spherical glass

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

Device	Item	Symbol	Maximum Rated Value			Unit
			1200	1300	1450	
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	1200	IF=20mA		0.8	1.3	V			
		1300			0.8	1.3				
		1450			0.8	1.3				
	Reverse Current			VR=5V			10	uA		
		Total Radiated Power	1200		IF=20mA		1.3			mW
			1300				1.3			
	1450			1.0						
	Peak Wavelength	1200	IF=20mA		1150	1200	1250	nm		
					1250	1300	1350			
				1400	1450	1500				
Half Width		IF=20mA			75		nm			
					75					
					75					
PD	Output Current	1200	IF=20mA VR=0V		45		uA			
		1300			45					
		1450			35					
	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