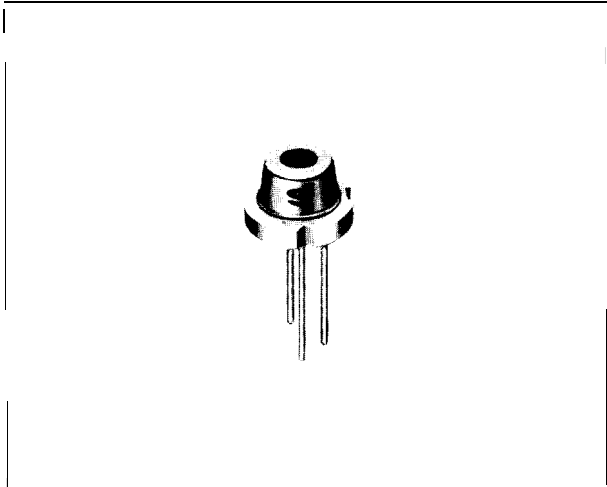


Features

- Compact (diameter: 5.6 mm)
- Wavelength: 840nm
- Single transverse mode

Applications

- Measurement instruments
- Analysis Instruments



Absolute Maximum Ratings

(Tc = 25°C)

Parameter	Symbol	Ratings	Units
Optical power output	Po	5	mW
Reverse voltage	Laser	2	V
	PIN	30	
Operating temperature *1	Topr	-10 to +60	°C
Storage temperature **	Tstg	-40 to +85	°C

* 1 Case temperature

Electro-optical Characteristics **

(Tc = 25°C)

Parameter	Symbol	Condition	Ratings		Units	
			MIN	MAX		
Threshold current	Ith	---	50	70	mA	
Operating current	Iop	Po = 3mW	60	85	mA	
Operating voltage	Vop	Po = 3mW	1.75	20	V	
Wavelength**	λp	Po = 3mW	840	850	nm	
Monitor current	Im	Po = 3mW VR = 15V	0.12	045 085	mA	
Radiation characteristics	Angle *3 Parallel to Junction	Po = 3mW	8.5	12	16	deg
	Perpendicular to junction	Po = 3mW	25	40	48	deg
Ripple		Po = 3mW	---	---	±20	%
Emissionpoint accuracy	Angle	Po = 3mW	---	---	±2	deg
		Po = 3mW	---	---	±3	deg
Position	Δx, Δy, Δz	---	---	---	±80	μm
Differential efficiency	η	2mW If(3mW) - If(1mW)	1	2	0.25 0.60	mW/mA

* 1 Initial value

* 2 Single transverse mode

* 3 Angle at 50% peak Intensity (l width at half-maximum)

Electrical Characteristics of Photodiode

(Tc = 25°C)

Parameter	symbol	Condition	Ratings			Units
			MIN	TYP	MAX	
Sensitivity	S	VR = 15V	---	0.15	---	mA/mW
Dark current	ID	VR = 15V	---	---	150	---
Terminal capacitance	Ct	VR = 15V	---	3.5	---	2 - "