HL1221C

InGaAsP LD

T-41-05
F-18-09

Description

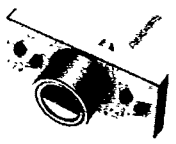
HL1221C is a 1.2 μm InGaAsP laser diode with double heterojunction structure.

It is suitable as a light source in fiberoptic communications and various other types of optical equipment.

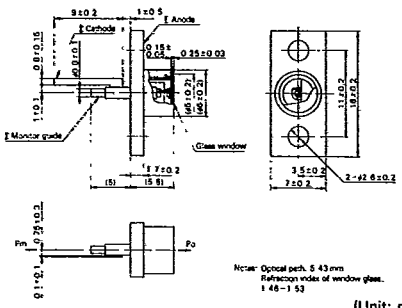
Monitoring power is output from the glass rod as optical output power.

Features

- Long wavelength light output: λ_p = 1170–1230 nm
- 5 mW CW operation at room temperature
- Fast pulse response: t_r, t_f ≦ 0.5 ns



Package Dimensions



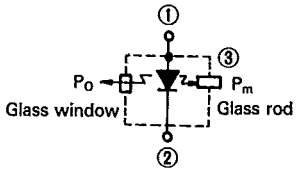
(Unit: mm)

C-type

Absolute Maximum Ratings (T_C = 25°C)

Items	Symbols	Values	Units
Optical output power	P_O	5	mW
Reverse voltage	V_R	2	V
Operating temperature	T_{opr}	0 to +50	°C
Storage temperature	T_{stg}	−40 to +60	°C

Internal Circuit



Optical and Electrical Characteristics (T_C = 25°C)

Items	Symbols	min.	typ.	max.	Units	Test conditions
Threshold current	I_{th}		30	80	mA	
Optical output power	P_O	5			mW	Kink free
		1.5	3.0		mW	$I_F = I_{th}$ + 20 mA
Monitor power	P_m	0.5			mW	$I_F = I_{th}$ + 20 mA
Lasing wavelength	λ_p	1170	1200	1230	nm	P_O = 3 mW
Spectral width	$\Delta\lambda$		2		nm	P_O = 3 mW
Beam divergence parallel to the junction	$\theta_{//}$		30		deg.	P_O = 3 mW, FWHM
Beam divergence perpendicular to the junction	$\theta_{\perp}$		40		deg.	P_O = 3 mW, FWHM
Rise time	t_r			0.5	ns	
Fall time	t_f			0.5	ns	