INPHENIX

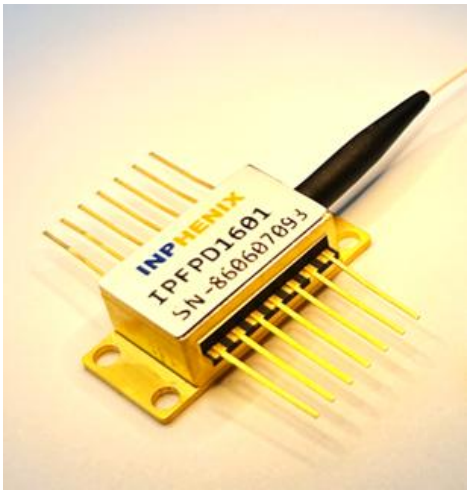
Product Specification, Revision 1.51

Fabry-Perot Laser

IPFPD1502(1550nm)

Features

- High Peak Optical Power (Pulsed)
- SM, MM and PM fiber options
- Custom packaging available
- 14-pin BUT / 14-pin DIL Available



Applications

- Optical Sensor
- OTDR
- Range Finding
- Spectroscopy

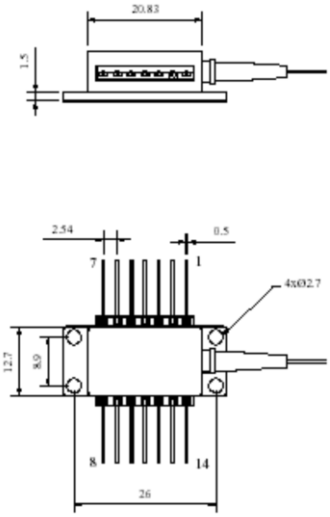
Device Specifications

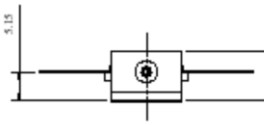
Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_c	1520	1550	1580	nm
Spectrum Width (rms)	$\Delta\lambda$	-	5	-	nm
Pulse Output Power	P_o	-	180	-	mW
Forward Current	I_f	-	-	1000	mA
Threshold Current	I_{th}	-	20	-	mA

Absolute Maximum Ratings

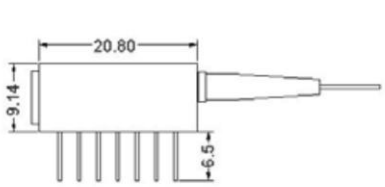
Parameter	Min.	Max.	Unit
Operating Temperature	– 20	70	°C
Storage Temperature	– 40	85	°C
TEC Drive Current	-	1.5	A
TEC Drive Voltage	-	3.6	V
Maximum Current	200		mA
Thermistor Resistance	10kΩ @ 25°C		
SLD Chip Temperature Setting	25°C		
Fiber Type	SMF/PMF/MMF		
Fiber Jacket	250µm tight buffer with 900µm loose tube		
Package	14-pin DIL/14-pin BUT		
Lead Solder Temperature	260°C for 10 Seconds		

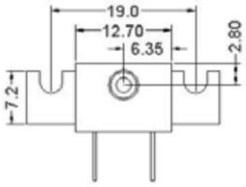
Package Dimensions

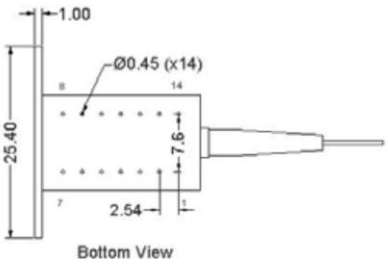




Dimensions in mm
Tol: ±0.13







14-Pin BUT Package

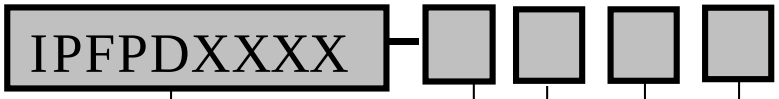
14-Pin DIL Package

Pin Definition

14-pin BUT package				14-pin DIL package			
Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	TEC (+)	8	NC	1	TEC (+)	8	NC
2	Thermistor	9	NC	2	NC	9	LD (-)
3	NC	10	LD (+)	3	NC	10	Case
4	NC	11	LD (-)	4	NC	11	Thermistor
5	Thermistor	12	NC	5	LD (+)	12	Thermistor
6	NC	13	Case	6	NC	13	NC
7	NC	14	TEC (-)	7	NC	14	TEC (-)

- If the LD is ordered with a Back Facet Monitor, Pin 7 is PD-Cathode and Pin 8 is PD+Anode

Part Numbering System



Model:
IPFPDXXXX: FP Device

Package:
1: 14-pin DIL
2: 14-pin Butterfly

Fiber Type:
1: SM Fiber
2: PM Fiber
3: MM Fiber

Jacket Type:
1: 900µm
2: 250µm tight buffer

Connector Type:
0: No Connector
3: FC/APC
4: FC/UPC
7: SC/APC
8: SC/UPC

Back Facet Monitor:
Available upon request

Example: IPFPD1502-1224: 1550nm FP in 14-pin DIL with 250µm tight buffered PM Fiber with FC/UPC connectors

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