

Fabry-Perot Laser

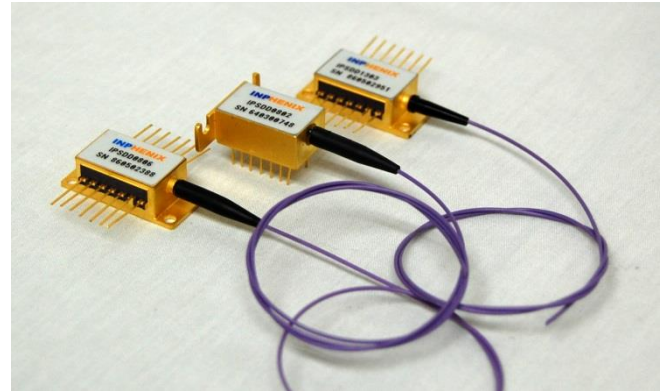
IPFPD0701(785nm)

Features

- Low Threshold and Operating Current
- High Modulation Speed, up to 2.5 Gb/s
- Wide Operational Temperature Range
- 14-pin /, 14-pin DIL Available

Applications

- Optical Transmission
- Data Communication
- Biometer
- Local Optical Network
- FTTH (Fiber to the Home)



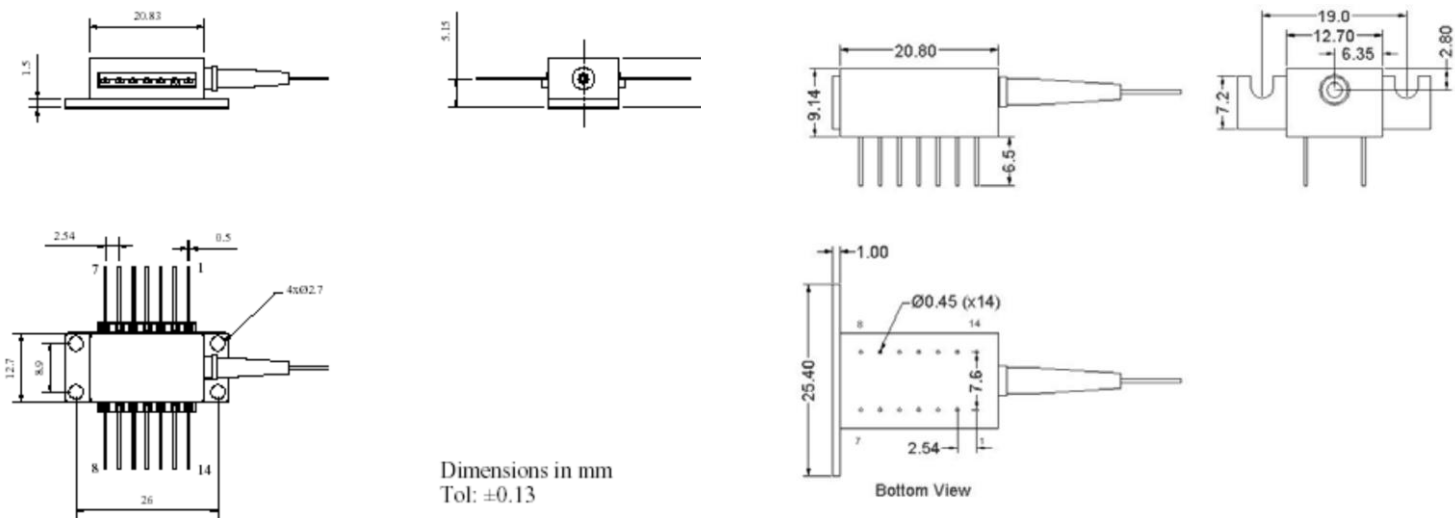
Device Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_c	782	785	792	nm
Spectrum Width (rms)	$\Delta\lambda_{10dB}$	1	1.5	5	nm
Output Power CW	P_{op}	0.55	0.6	0.65	W
Operating Current	I_{op}	-	1.0	-	A
Operating Voltage	V_{op}		2.0	2.2	V
Threshold Current	I_{th}	0.25	0.40	0.55	A
SLOW AXIS DIVERGENCE, FWHM		7	8	9	deg
FAST AXIS DIVERGENCE, FWHM		23	26	28	deg
Slope Efficiency	η	0.8	-	1.2	W/A

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit
Operating Temperature	- 20	70	°C
Storage Temperature	- 40	85	°C
Maximum Current	1.2		A
Fiber Type	SMF/PMF/MMF		
Fiber Jacket	250 μ m tight buffer with 900 μ m loose tube		
Package	14-pin DIL/14-pin BUT		
Lead Solder Temperature	260°C for 10 Seconds		

Package Dimensions



14-Pin BUT Package

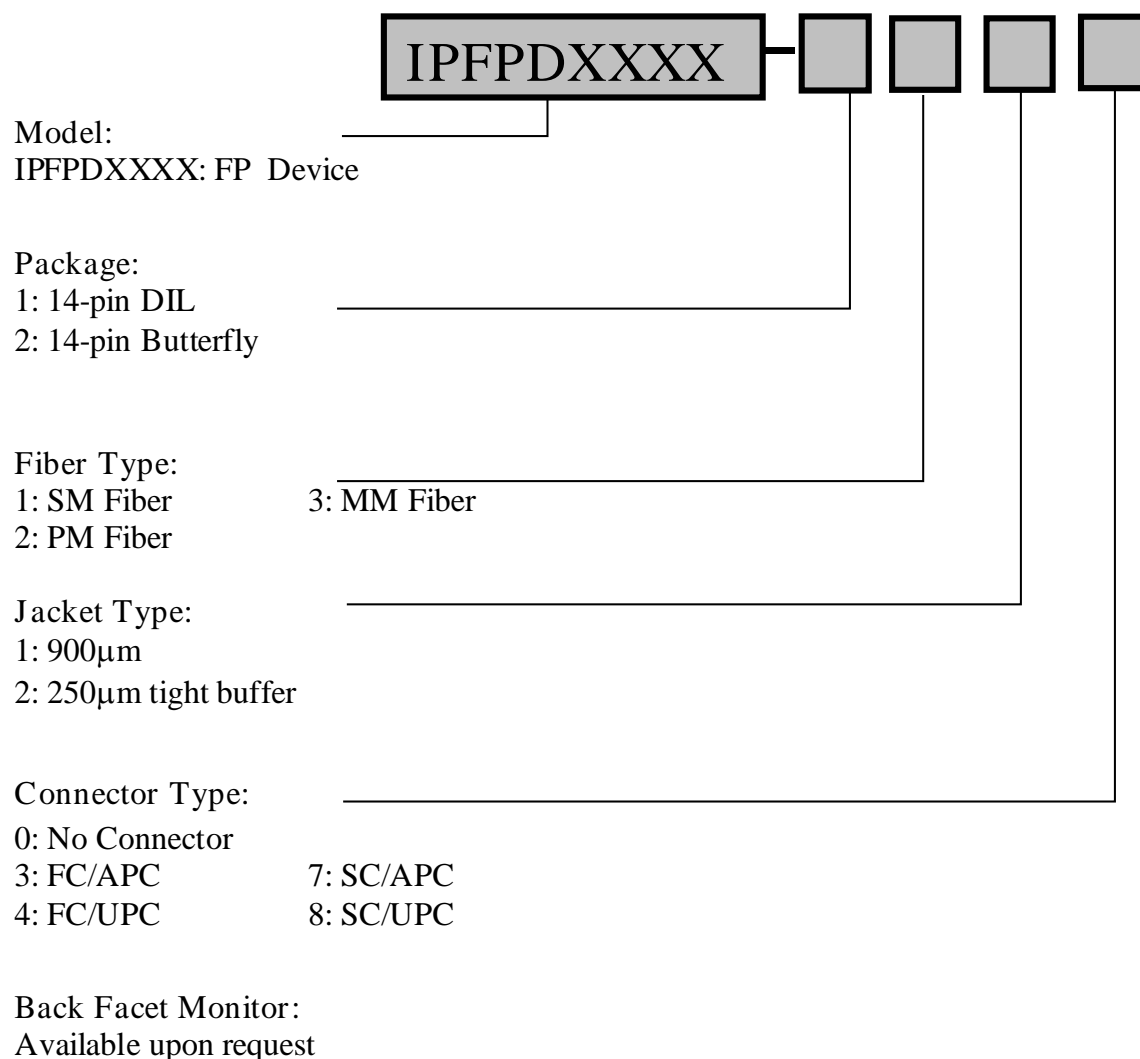
14-Pin DIL Package

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



Example: IPFPD0701-1224: 785nm FP in 14-pin DIL with 250μm tight buffered PM Fiber with FC/UPC connectors

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