INPHENIX

Product Specification, Revision 1.51

Fabry-Perot Laser

IPFDT1402(1490nm)

Features

- · **Low Threshold and Operating Current**
- · **High Modulation Speed, up to 2.5 Gb/s**
- · **Wide Operational Temperature Range**
- · **TO56, TO8, TO9 Available**

Applications

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

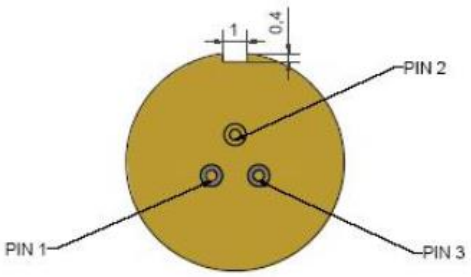
Device Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_c	1480	1490	1500	nm
Spectrum Width (rms)	$\Delta\lambda$		5		nm
Output Power	P_o	1	-	3	mW
Forward Current	I_f	-	-	50	mA
Threshold Current	I_{th}	-	5	15	mA
PD Monitor Current	I_{pd}	50			uA
Slope Efficiency	Se	0.05			W/A

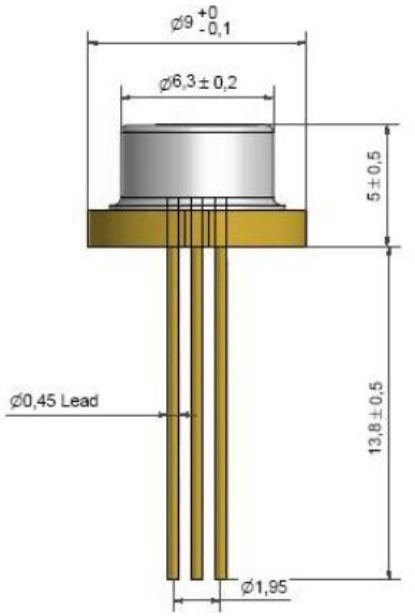
Absolute Maximum Ratings

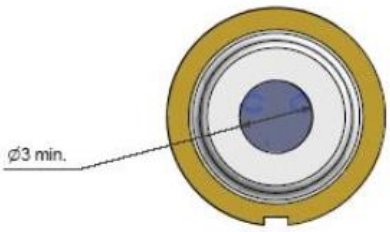
Parameter	Min.	Max.	Unit
Operating Temperature	– 20	70	°C
Storage Temperature	– 40	85	°C
TEC Drive Current	-	1.5	A
TEC Drive Voltage	-	3.6	V
Maximum Current	200		mA
Thermistor Resistance	10kΩ @ 25°C		
SLD Chip Temperature Setting	25°C		
Fiber Type	SMF/PMF/MMF		
Fiber Jacket	250µm tight buffer with 900µm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

Package Dimensions

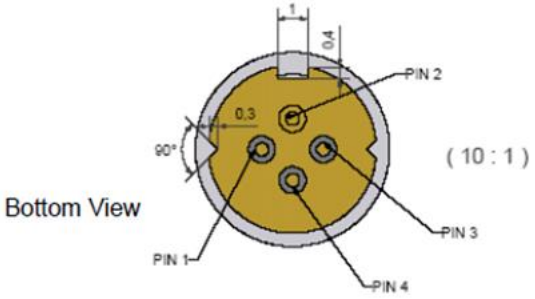


Pin#	Connection
1	LD Anode
2	LD Cathode, PD Cathode and Case
3	PD Anode



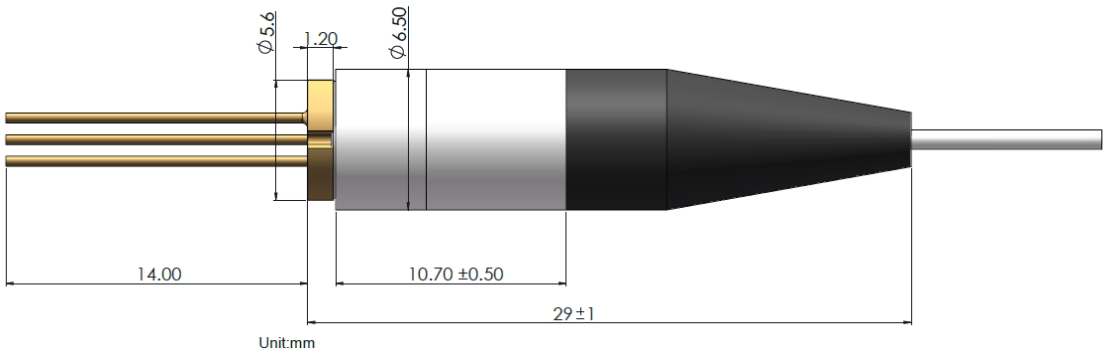


φ9 mm TO-CAN(TO56/TO8/TO9)



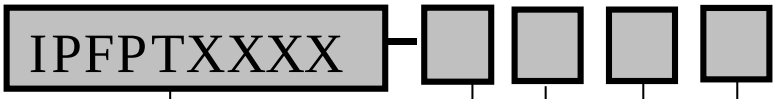
Pin#	Connection
1	PD Anode
2	LD Cathode, PD Cathode and Case
3	LD Anode
4	

Pigtail Information	
Connector	TBD
Fiber	SMF
Fiber Length	0.5 m



φ5.6 mm Pigtailed Coaxial Device (TO56 Header)

Part Numbering System



Model:
IPFPTXXXX: Fabry-Perot Laser Device

Package:
7: TO56
8: TO8
9: TO9

Fiber Type:
0: No Cap 1: Single Mode 5: Ball Lens
6: Flat Glass 7: Aspheric Lens

Jacket Type:
0: No Jacket
1: 900µm
2: 250µm tight buffer

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

Back Facet Monitor:
Available upon request

Example: IPFPT1402-9700: 1490nm FP TO9 package with Aspheric lens.

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