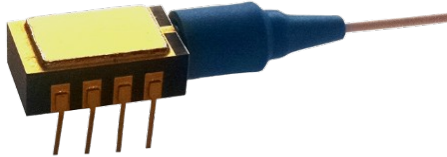


Laser Diode 1550nm 5mW



FPL-1550-8DL-5 is single mode laser diode module designed for optical measurement and communication. The laser is packaged in 8-pin miniDIL package with monitor photodiode. Module is pigtailed with 0,7-1,0 m of single mode polarization maintaining fiber and connectorized by FC/PC connector.

Key Features

- Optical output: 5mW
- Efficient coupling into single mode fiber
- CW or pulsed operation
- SM or PM Fiber (ø0.9mm)
- FC-PC connector
- 8-pin miniDIL package
- Internal monitor PD
- Low power consumption

Optical and electrical characteristics: (T = 25°C)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Output Power	P_f			3	5	mW
Forward Voltage	V_F	$P_f=5mW$			2.5	V
Threshold Current	I_{th}			9	15	mA
Forward Current	I_F	$P_f=5mW$		30	50	mA
Rise Time	T_r	$P_f=5mW, 20\%-80\%$			300	ps
Fall Time	T_f	$P_f=5mW, 20\%-80\%$			300	ps
Center Wavelength	λ_c	$P_f=5mW$	1530	1550	1570	nm
Spectral Width	$\Delta\lambda$	$P_f=5mW$		2	3	nm
Monitor Current	I_m	$P_f=5mW, V_{RD}=5V$	20		500	μA
PD Dark Current	I_d	$V_{RD}=5V$			0.1	μA
Extinction Ratio	X_P	$P_f=5mW$	17			dB

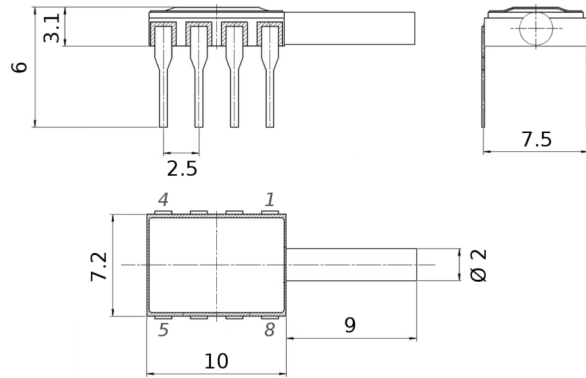
Absolute Maximum Ratings

Item	Symbol	Rating	Unit
LD Forward Current	I_f	70	mA
LD Reverse Voltage	V_r	1.8	V
PD Reverse Voltage	V_{RD}	10	V
Operation Case Temperature	T_c	-60 to +85	°C
Storage Temperature	T_{stg}	-60 to +85	°C

PACKAGING

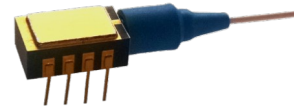
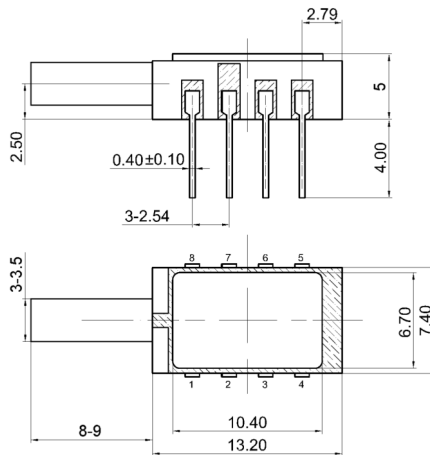
DIP:

No.	FUNCTION
1	NC
2	LD anode +
3	NC
4	PD cathode +
5	PD anode -
6	LD cathode -
7	NC
8	NC



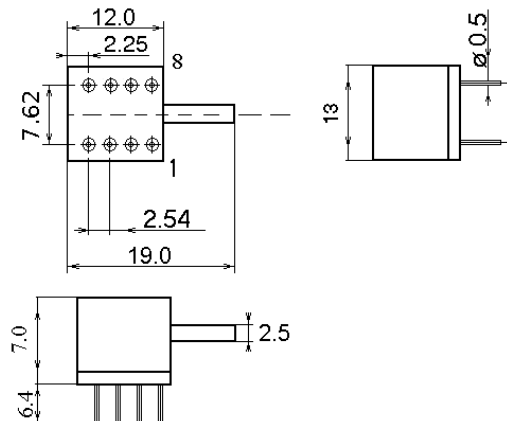
OEP:

No.	FUNCTION
1	NC
2	LD anode +
3	LD cathode -, case
4	PD cathode +
5	PD anode -
6	LD cathode -, case
7	NC
8	NC



MiniDIL:

No.	FUNCTION
1	NC
2	LD anode +
3	LD anode +
4	PD cathode +
5	PD anode -
6	LD cathode -, case
7	NC
8	NC



LCC:

No.	FUNCTION
1	NC
2	Case
3	LD cathode -
4	PD cathode +
5	PD anode -
6	Case
7	LD anode +
8	NC

