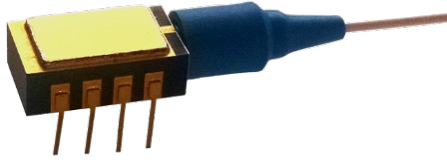


## DFB Laser Diode 1550nm 5mW



DFB-1550-8DL distributed feedback laser is uncooled semiconductor MQW-DFB laser 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	$\lambda_c$	$P_f=5mW$	1530	1550	1570	nm
Spectral Width	$\Delta\lambda$	$P_f=5mW$			0.01	nm
Monitor Current	$I_m$	$P_f=5mW, V_{RD}=5V$	20		500	$\mu A$
PD Dark Current	$I_d$	$V_{RD}=5V$			0.1	$\mu A$
Extinction Ratio	$X_P$	$P_f=5mW$	17			dB

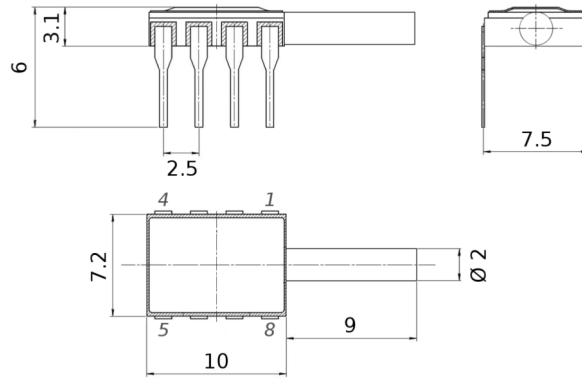
### Absolute Maximum Ratings

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

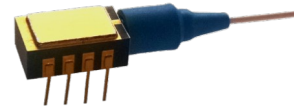
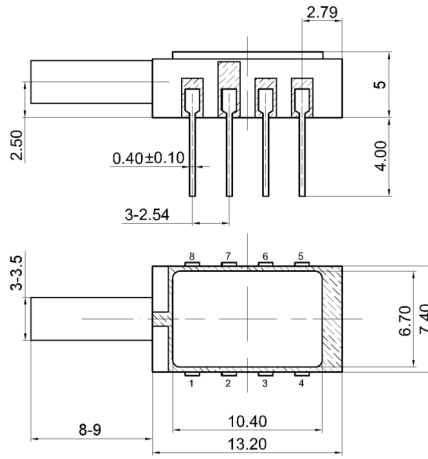
## DIP:

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



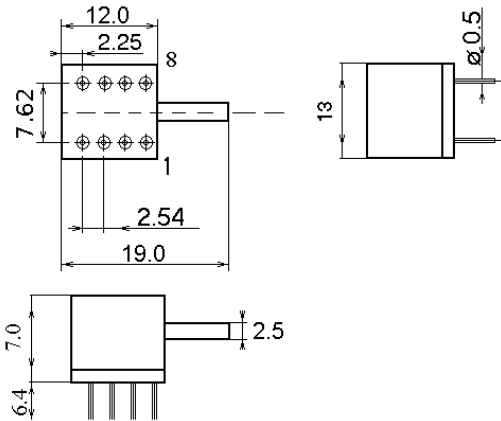
## OEP:

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

