

1.28 ÷ 1.34  
μm

Pulse output power  
> 80 mW

LFO-24-ip

### Description:

**LFO-24-ip** – is a series of optical modules based on Mitsubishi high-efficiency pulse 1310nm MQW InGaAsP/InP Fabry-Perot laser diode and coupled with singlemode optical fiber. Hermetically sealed modules are performed in standard coaxial package with collimating gradient lens. The modules operate in wide temperature range, have stable output power and more than  $5 \cdot 10^5$  hours of lifetime.

**LFO-24-ip** – are the best light sources for optical reflectometers and other metrology devices.



### Absolute maximum ratings:

#### Laser diode

Pulse operating current (mA)	800
CW operating current (mA)	50
Reverse voltage (V)	2.0
Pulse duration (μs)	10
Reverse duty free	100

#### Environment

Operating temperature range (°C)	-40..+55
Storage temperature range (°C)	-40..+70

#### Assembly

Pin soldering temperature (°C)	200
Pin soldering time (sec)	3.0

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

Characteristics	Symbol	Test condition	Min	Typ.	Max	Units
<b>Laser diode</b>						
Pulse output power	$P_{Pul}$	$I=I_{Pul}, \tau_p=10 \mu s$	80			mW
Pulse operating current	$I_{Pul}$	$P= P_{Pul}$		500	700	mA
CW output power	$P_{CW}$	$I=I_{CW}$	4.5			mW
CW operating current	$I_{CW}$			30		mA
Operating voltage	$U_{Pul}$	$I=I_{Pul}, \tau_p=10 \mu s$		3.0	4.5	V
Wavelength	$\lambda_{OP}$	$I=I_{Pul}, \tau_p=10 \mu s$	1280	1310	1340	nm
Spectral width (FWHM)	$\Delta\lambda$	$I=I_{Pul}, \tau_p=10 \mu s$		7.0	10	nm
Threshold current	$I_{TH}$	CW		10	15	mA
Rise/fall time	$\tau_R/\tau_F$	$P_{OP}$		1.0	2.0	nsec
<b>Optical fiber</b>						
Fiber core/cladding diameter	$D_C/D_{CL}$			9/125		μm
Fiber length	L			400..1500		mm
Optical connector type				«FC»		

**ROITHNER LASERTECHNIK**

A-1040 VIENNA, SCHOENBRUNNER STRASSE 7, AUSTRIA

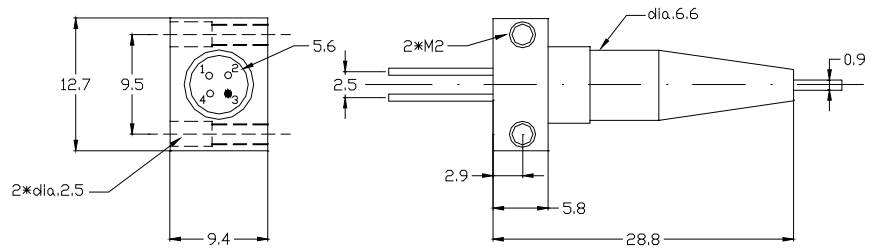
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# LFO-24-ip

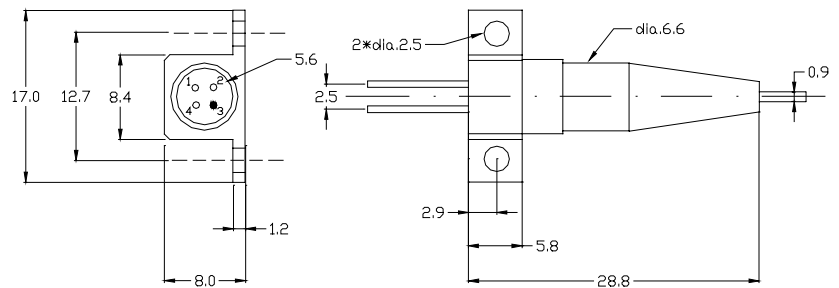
## Package specifications (type «A»):

Pin	Function
1	-
2	-
3	LD anode (+), case
4	LD cathode (-)



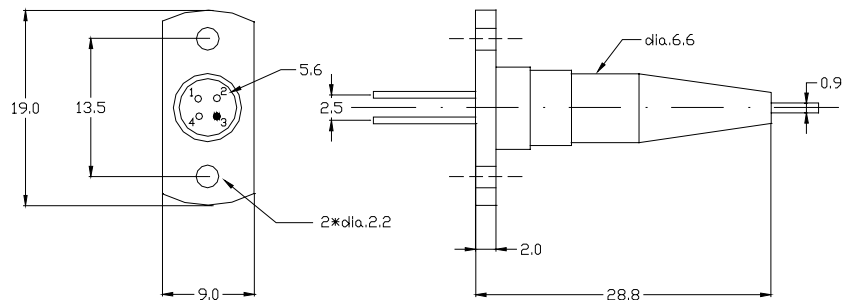
## Package specifications (type «B»):

Pin	Function
1	-
2	-
3	LD anode (+), case
4	LD cathode (-)



## Package specifications (type «C»):

Pin	Function
1	-
2	-
3	LD anode (+), case
4	LD cathode (-)



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