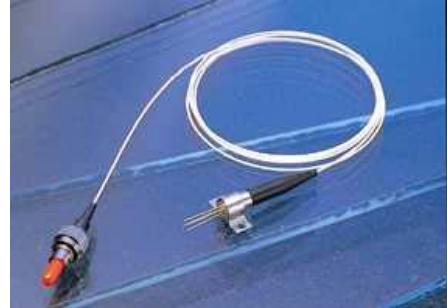




Description:

LFO-18/2-ip – is the optical module on the base of uncooled 1,55µm MQW InGaAsP/InP Fabry-Perot Mitsubishi laser diode, coupled with singlemode optical fiber. Hermetically sealed modules are performed in standard packages with built-in InGaAs monitor photodiode and collimating gradient microlens. The modules operate in wide temperature range, have stable output power and lifetime more than $5 \cdot 10^5$ hours.

LFO-18/2-ip – is the best source for digital (up to 622 Mb/s) telecommunication lines, optical testers and other metrology devices, local optical networks and many other applications.



Absolute maximum ratings:

Laser diode

Output power (mW)	3.0
Reverse voltage (V)	2.0

Monitor photodiode

Reverse voltage (V)	10
Forward current (mA)	2.0

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
Laser diode						
Output power	P_{OP}	I_{OP}		2.0		mW
Wavelength	λ_{OP}	P_{OP}	1520	1550	1580	nm
Spectral width FWHM	$\Delta\lambda$	P_{OP}		1.5	3.0	nm
Threshold current	I_{TH}	CW	5.0	10	20	mA
Forward current	I_F	P_{OP}	20	30	45	mA
Forward voltage	U_{OP}	P_{OP}		1.1	1.5	V
Rise time/fall time	τ_R/τ_F	P_{OP}		0.3	0.7	ns
Monitor photodiode						
Monitor current	I_{PD}	$U_{REV}=5.0\text{ V}, P_{OP}$	100	500		µA
Dark current	I_D	$U_{REV}=5.0\text{ V}$		0.01	0.1	µA
Capacitance	C_{PD}	$U_{REV}=5.0\text{ V}, f=1\text{ MHz}$		10	20	pF
Optical fiber						
Fiber core/cladding diameter	D_C/D_{CL}			9/125		µm
Fiber length	L			400..1500		mm
Optical connector type				«FC»		