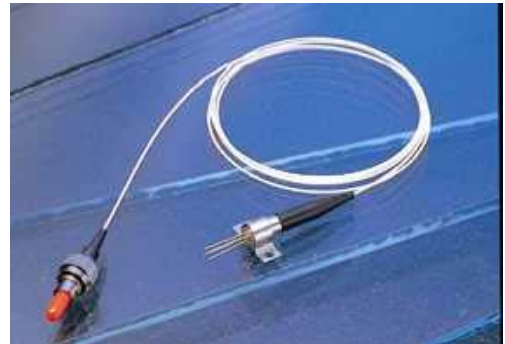




Description:

LFO-14-ip - optical module on the base of uncooled 1310 nm MQW InGaAsP/InP Fabry-Perot laser diode, coupled with singlemode optical fiber. Hermetically sealed modules are performed in standard package with built-in monitor photodiode and collimator microlens. Modules operate in wide temperature range, have stable output power and lifetime more than $5 \cdot 10^6$ hours.

LFO-14-ip - the best source for analog and 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

Max. output power (mW)	1.5
Reverse voltage (V)	2.0

Monitor photodiode

Reverse voltage (V)	10
Forward current (mA)	1.0

Environment

Operating temperature range (°C)	-30..+60
Storage temperature range (°C)	-40..+75

Assembly

Pin soldering temperature (°C)	200
Pin soldering time (sec)	5.0

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

Characteristics	Symbol	Test condition	Rating	Units
Laser diode				
Output power from fiber end	P_{OP}	I_{OP}	1.0	mW
Wavelength	λ_{OP}	P_{OP}	1.280..1.340	μm
Spectral width FWHM	$\Delta\lambda$	P_{OP}	<5.0	nm
Threshold current	I_{TH}	CW	<15	mA
Forward current	I_F	P_{OP}	<40	mA
Forward voltage	U_{OP}	P_{OP}	<1.6	V
Rise time/fall time	τ_R/τ_F	P_{OP}	<0.5	ns
Monitor photodiode				
Monitor current	I_{PD}	$U_{REV}=5.0 \text{ V}, P_{OP}$	>100	μA
Dark current	I_D	$U_{REV}=5.0 \text{ V}$	<0.1	μA
Capacitance	C_{PD}	$U_{REV}=5.0 \text{ V}, f=1 \text{ MHz}$	<15	pF
Optical fiber				
Fiber core/cladding diameter	D_C/D_{CL}		9/125	μm
Fiber length	L		400..1500	mm
Optical connector type			«FC» or «ST»	