



NYC04D Series DML DFB Laser Module

✧ Product Features

- High-Dynamic-Range
- Bandwidth better than 4GHz
- CWDM
- Low power consumption
- Low cost



✧ Product Applications

- Antenna Remoting
- Cellular and PCS Networks
- Analog RF links transmission
- Tracking, Telemetry, and Control
- Broadband wireless communication

✧ Introduce Of NYC04D

NYC04D series DML laser module mainly consist of DML DFB laser, automatic optical power control circuit, voltage stabilizing conversion circuit and monitoring indication circuit. The wavelength of DML laser is CWDM (1270nm, 1290nm, 1310nm, 1330nm, 1350nm 1370nm). The modulation bandwidth is better than 4GHz. Output power can be better than 2mW. The working power supply voltage of the module is a single positive power supply, which can stably work in the voltage range of +7V ~+36V. The module also has the function of indicating normal power supply and normal optical power output.



Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage temperature	T _{STG}	-40	+25	+70	°C
Operation temperature	T _C	-20	+25	+55	°C
Input RF power ⁽¹⁾	P _{in}	-	0	+17	dBm
Operation voltage	V _{in}	+7	+12	+36	V

(1) Continuous wave (CW).

Optical and Electrical Specification (T_c=25°C)

Parameter	Model	Symbol	Min.	Typ.	Max.	Unit	Remark
Wavelength	UC	λ	1270	1310	1370	nm	ITU Standard
	LC		-	CWDM	-		
Frequency (3dB)	-	f _{3dB}	0.1	-	4	GHz	-
Optical Output Power	-	P	-	1	-	mW	-
Relative Intensity Noise	UC	RIN	-	-	-150	dBc/Hz	-
	LC		-	-	-155		
VSWR	-	VSWR	-	-	2		
Input 1 dB Compression	-	-	-	+10	-	dBm	-

Power Supply (T_c = 22±3°C)

Parameter	Min.	Typ.	Max.	Unit
Voltage	+7	+12	+36	V
Current ⁽²⁾	0.03	0.1	0.15	A

(2) Test condition: V_{in}=+12V.



Typical Data

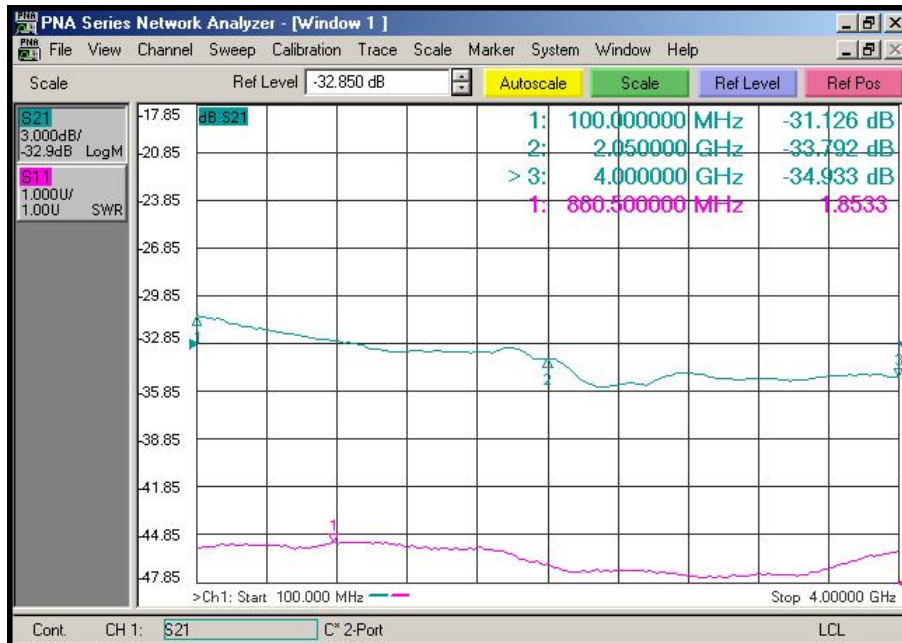


Fig. 1 NYC04D-CL DML DBF Laser Typical Frequency Curve

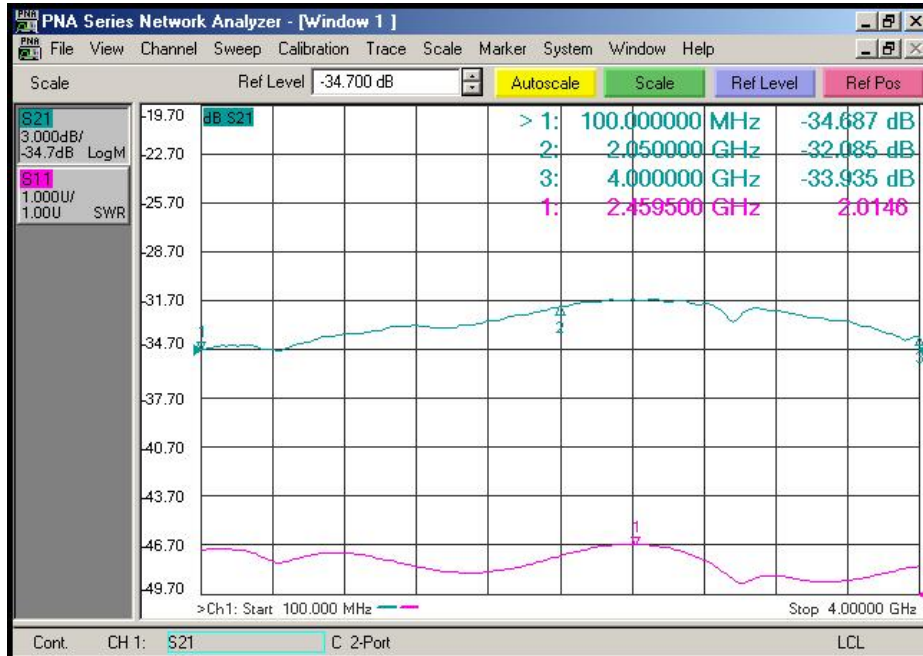


Fig. 2 NYC04D-UC DML DBF Laser Typical Frequency Curve



Typical spectral curve

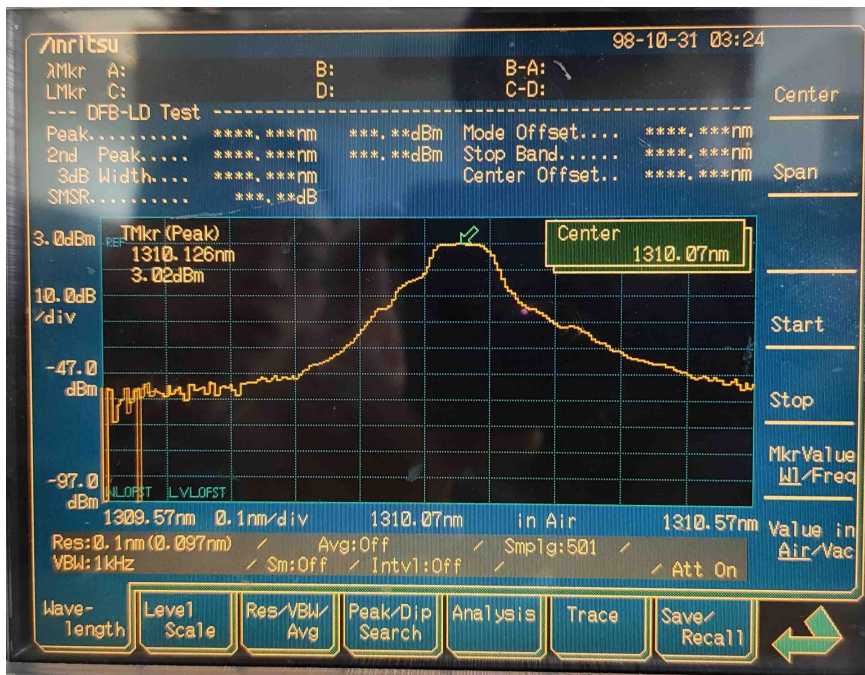
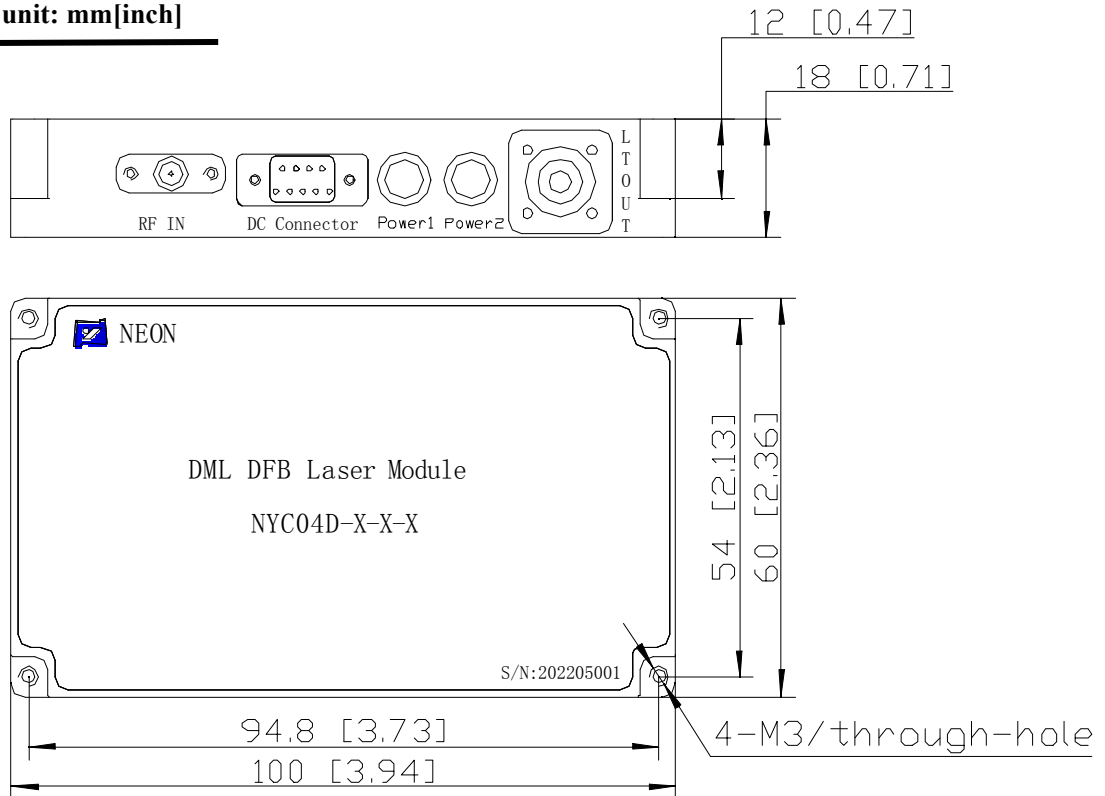


Fig. 3 NYC04D DML DBF Laser Typical spectrum Curve

Dimension unit: mm[inch]



RF Connector : SMA

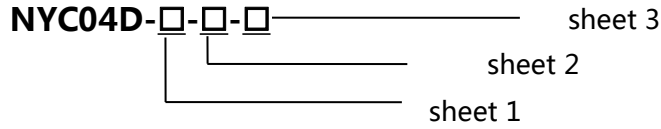
Power Connector : J30J-9-ZKP

Figure 4 NYC04D DML DBF Laser Module Dimension

NYC04D Series DML DFB Laser Module



Order Information



Sheet 1:

Model	Typical Wavelength
UL	1310nm
CL	CWDM (Optional wavelength)

Sheet 2 :

Model	Power
00	1mW
02	2mW
04	4mW
06	6mW

Sheet 3 :

Model	Connector	Remark
N	No	Flange
A	FC / APC	Standard 9/125μm SM Fiber
P	FC / PC	Standard 9/125μm SM Fiber