

FEATURES

- **OUTPUT POWER:**
 $P_r = 50 \text{ mW}$ at $I_{FP} = 400 \text{ mA}^1$
- **LONG WAVELENGTH**
 $\lambda_c = 1310 \text{ nm}$
- **COAXIAL MODULE WITHOUT THERMOELECTRIC COOLER**
- **SINGLE MODE FIBER PIGTAIL**

DESCRIPTION

The NDL75148P Series is a 1310 nm newly developed strained Multiple Quantum Well (st-MQW) structure laser diode coaxial module with single mode fiber. It is designed as the light source of optical measurement equipment (OTDR).

ELECTRO-OPTICAL CHARACTERISTICS

PART NUMBER PACKAGE OUTLINE			NDL7514P Series		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
T_c = 25°C					
V _{FP}	Forward Voltage, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	V		2.5	4.0
I _{TH}	Threshold Current	mA		20	30
P _r	Optical Output Power from Fiber, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	mW	25	50	
λ _c	RMS Center Wavelength, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	nm	1290	1310	1330
σ	RMS Spectral Width, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	nm		4.5	10
t _r	Rise Time, 10 to 90%	ns			1.0
t _f	Fall Time, 90 to 10%	ns			1.0
T_c = 0 to +60°C					
I _{TH}	Threshold Current,	mA			50
PF	Optical Output Power from Fiber I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	mA		15	30
λ _c	RMS Center Wavelength, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	nm	1280		1342.5
Δλ/ΔT	Temperature Dependence of Center Wavelength	nm/°C			0.35
σ	RMS Spectral Width, I _{FP} = 400 mA, PW = 10 μs, Duty = 1%	nm			10

NDL7514P SERIES

ABSOLUTE MAXIMUM RATINGS¹

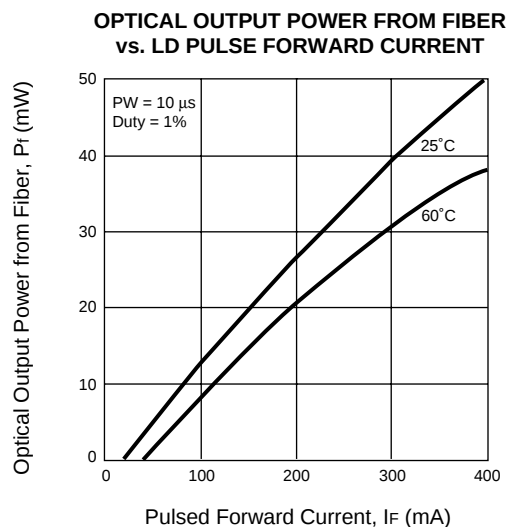
(T_c = 25°C, unless otherwise specified)

SYMBOLS	PARAMETERS	UNITS	RATINGS
I _{FP}	Pulsed Forward Current ²	mA	600
V _R	Reverse Voltage	V	2.0
T _c	Operating Case Temperature	°C	-20 to +60
T _{STG}	Storage Temperature	°C	-40 to +85
T _{SLD}	Lead Soldering Temperature (10 s)	°C	260

Note:

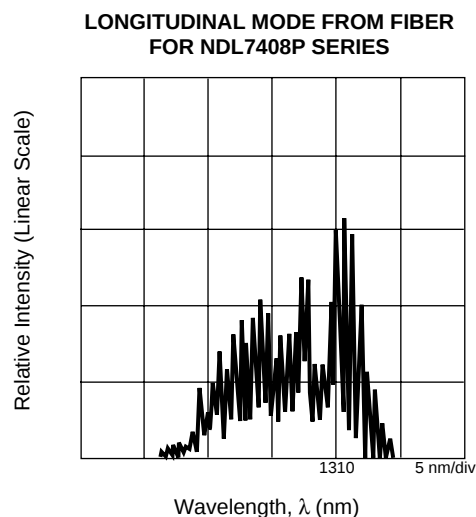
- Operation in excess of any one of these parameters may result in permanent damage.
- Pulse Condition: Pulse Width (PW) = 10 μs, Duty = 1%.

TYPICAL PERFORMANCE CURVES



ORDERING INFORMATION

Part Number	Available Connector	Flange Type
NDL7514P	Without Connector	no flange
NDL7514PC	With FC-PC Connector	
NDL7514PD	With SC-PC Connector	
NDL7514P1	Without Connector	flat mount flange
NDL7514P1C	With FC-PC Connector	
NDL7514P1D	With SC-PC Connector	



OUTLINE DIMENSIONS (Units in mm)

