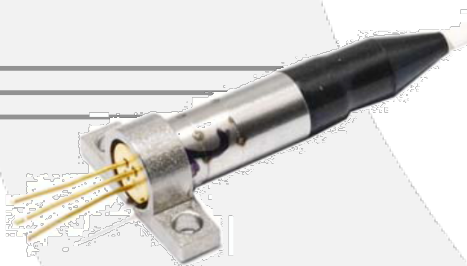


LDM5S515 Series



DEVICE

1470 nm to 1610 nm DFB Laser, Coaxial

OVERVIEW

The LDM5S515 is a CWDM Coaxial DFB-LD Module for CWDM analog communication, CATV return-path, laboratory instrument, and R&D applications. The user can select the wavelength on this high-stability DFB laser chip with ranges between 1470 nm to 1610 nm. It has built-in InGaAsP monitor photodiode, built-in optical isolator and 4-pin coaxial-pigtailed package, single mode coupling, and FC/APC connector.

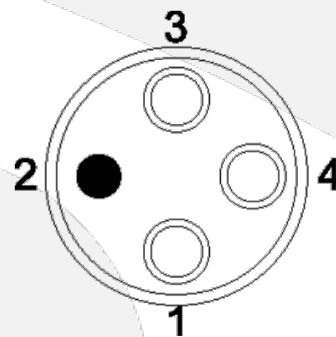
FEATURES

- Selectable wavelength: 1470 - 1610nm
- 4-pin coaxial-pigtailed, single mode coupling
- Built-in InGaAs monitor photodiode
- High-stability DFB laser chip
- Built-in optical isolator

ORDERING OPTIONS

LDM5S515-YYX	
x	Wavelength of DFB: 1 - 1470 nm 2 - 1490 nm 3 - 1510 nm 4 - 1530 nm 5 - 1550 nm 6 - 1570 nm 7 - 1590 nm 8 - 1610 nm
	Connector and Jacket: 00 - FC/APC, 3mm 01 - SC/APC, 3mm 02 - SC/APC, 0.9mm
	y

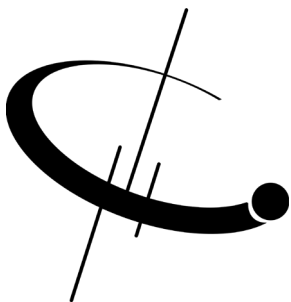
PIN OUT DIAGRAM



COAXIAL

PIN 1	PD(+)
PIN 2	LD(+) Case
PIN 3	LD(-)
PIN 4	PD(-)





LDM5S515 Series

SPECIFICATIONS

Threshold Current	8 mA typ., 15 mA typ.
Operating Current	100 mA max.
Analog Bandwidth	2.5 GHz typ. @ 30 mA
Monitor PD Current	50 uA min., 2 mA max.
Monitor PD Dark Current	10 nA max.
Photodiode Capacitance	10 pF min.
RF Passband Flatness	1.0 dB max.
Noise Power Ratio	40/14 min. @ 25 °C
Rise/Fall Time	500 ps max. to 3 Gb/s

GENERAL

OPTICAL

Center Wavelength	1470 nm ± 2 nm to 1610 nm ± 2 nm
Optical Isolation	20 dB
Optical Output Power	3 dBm typ.
Laser Linewidth	0.1 nm max.
Slope Efficiency	0.05 W/A min., 0.15 W/A max.
Side Mode Suppression Ratio	30 dB min.
Spurious Noise w/ Carrier	-60 dBc typ.
Spurious Noise w/out Carrier	-52 dBc typ.
Relative Intensity Noise	-150 dB/Hz max.

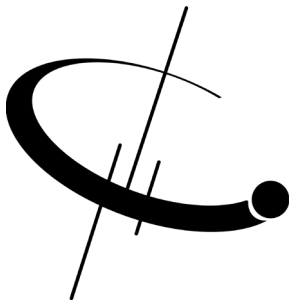
MAXIMUM RATING

Laser Diode Reverse Voltage	2 V
Laser Diode Forward Current	150 mA
Monitor PD Reverse Voltage	15 V
Monitor PD Reverse Current	2 mA

MECHANICAL

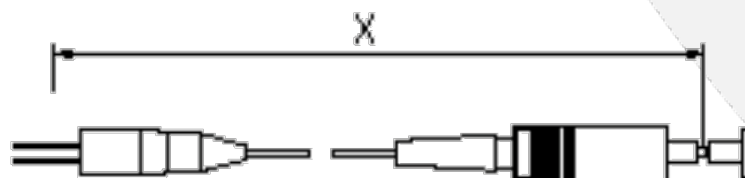
Operating Temperature	-20 °C to +75 °C
Storage Temperature	-40 °C to +85 °C
Power Supply Voltage	1.2 V typ., 2.0 V max.
Optical Connectors	FC/APC, SC/APC
Optical Fiber	SMF-28 with 900 um or 3 mm jacket
Dimensions	28 mm x 6 mm x 6 mm
Housing	Coaxial with Fiber Pigtail





LDM5S515 Series

MECHANICAL DRAWING



optilab