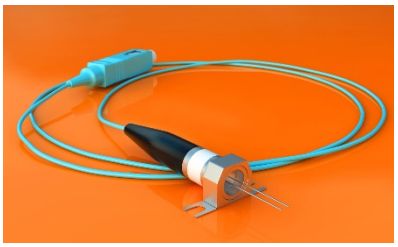
ML5532-1490

1490 nm coaxial FP laser module for pulsed applications

Overview

Modulight's ML5532-1490 is a high-performance single transverse mode 1490 nm Fabry-Pérot laser in a coaxial fiber pigtailed package. The laser emits 70 mW pulsed peak power (10 µs PW, 1% DC) at 1490 nm wavelength. This fiber pigtailed laser is designed to be used as light source in fiber optic test and measurement equipment.



Applications

Defense	Industrial	Communications
Test & Measurement	Test & Measurement	Test & Measurement

Electro-optical Characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit
Central Wavelength (I_{OP} = 750 mA)	λ	1470	1490	1510	nm
Optical Output Power (Peak Power)	P_{OPT}	60	70	-	mW
Operating Current ($P_{OPT, PEAK}$ = 30 mW)	I_{OP}	-	550	750	mA
Operating Voltage	V_{OP}	-	1.2	2	V
Threshold Current	I_{TH}	-	45	-	mA
Spectral Width	Δλ	-	5	7	nm

All above values are for operation @ 25°C. If not otherwise stated, the characteristics are for operation under pulse current (pulse width = 10 µs and duty cycle 1 %).

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
LD Forward Current	I_{FLD}	800	mA
Operating Temperature Range	T_{OP}	0...40 [1]	°C
Storage Temperature Range	T_{ST}	-40...85	°C

[1] A non-condensing environment should be ensured over the useful temperature range.

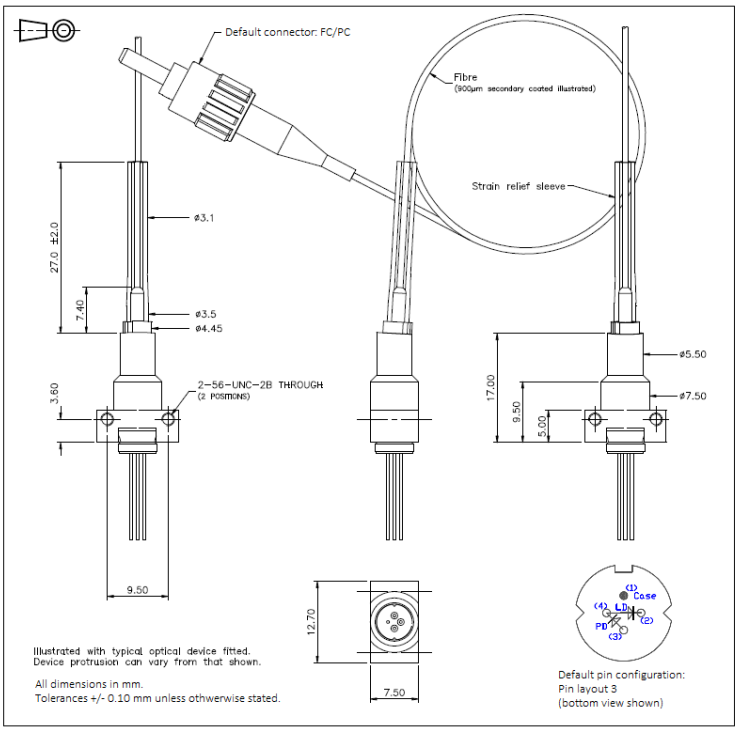
Optical Fiber Specification

Parameter	Symbol	Value	Unit
Fiber Length	L	100	cm
Mode Field Diameter	$∅_{CORE}$	9.5 ± 1.0	µm
Cladding Diameter	$∅_{CLAD}$	125 ± 2	µm
Outer Diameter	$∅_{OUT}$	900	µm

Minimum Fiber Bending Radius	d	30	mm
Default Fiber Connector		FC/PC [1]	

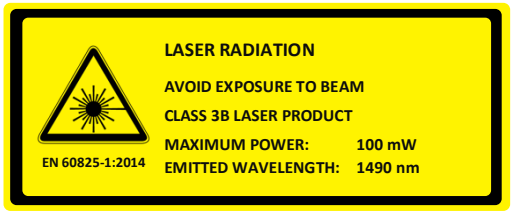
[1] Other connectors available on request.

Mechanical Specification



Safety Information

- The laser light emitted from this laser device may be invisible. The laser light is harmful to the human eye. Avoid eye and skin exposure to the beam, both direct and reflected.
- Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload. Please ensure ESD protection prior to handling the products.
- These Modulight products are not intended for use in systems where product malfunction can reasonably be expected to result in personal injury.



Peak power and wavelength are for safety analysis only, not to present device performance.

Liability note

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