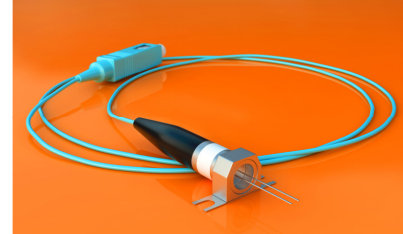


# ML1527

1650 nm coaxial FP laser module for pulsed applications

## Overview

Modulight's ML1527 is a high-performance single transverse mode 1650 nm Fabry-Pérot laser in a coaxial fiber pigtailed package. The laser emits 30 mW pulsed peak power (10  $\mu$ s PW, 1% DC) at 1650 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)	$\lambda$	1630	1650	1670	nm
Optical Output Power (Peak Power)	$P_{OPT}$	-	30	-	mW
Operating Current ( $P_{OPT} = 30$ mW)	$I_{OP}$	-	500	750	mA
Operating Voltage ( $P_{OPT} = 50$ mW, CW)	$V_{OP}$	-	1.4	2.0	V
Slope Efficiency	$\eta$	-	0.07	-	W/A
Threshold Current	$I_{TH}$	-	50	-	mA
Spectral Width	$\Delta\lambda$	-	3	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  $\mu$ s 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 <sup>1</sup>	°C
Storage Temperature Range	$T_{ST}$	-40...85	°C

<sup>1</sup> 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	$\varnothing_{CORE}$	9	$\mu$ m
Cladding Diameter	$\varnothing_{CLAD}$	125	$\mu$ m
Outer Diameter	$\varnothing_{OUT}$	900	$\mu$ m
Minimum Fiber Bending Radius	d	30	mm

### Mechanical Specification

Please contact Modulight sales team for detailed information of the package dimensions.

### Safety Information

- The laser light emitted from this laser diode is invisible and potentially 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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