

ML5740-658

Multi-chip red laser module, 658 nm

Overview

ML5740-658 is a multi-chip diode laser module in the ChiliLase product family. The package is robust and it has a small footprint of 38 x 48 mm and height of 22 mm.

Default output is 200/220 μm NA=0.22 fiber terminated with SMA-905 connector. The package includes a photodiode for power monitoring and a thermistor and TEC for temperature controlling.



Applications

Industrial	Medical
Illumination Imaging Pumping	Aesthetic Treatments Fluorescence Photodynamic Therapy

Electro-optical Characteristics, Typical Values

Parameter	Symbol	Typical value	Unit
Wavelength	λ	658	nm
Optical Output Power	P_{OPT}	2.5	W
Operating Current	I_{OP}	1.6	A
Operating Voltage	V_{OP}	8.6	V
Threshold Current	I_{TH}	0.4	A

Typical values for operation at 15°C.

Fiber Pigtail Characteristics

Parameter	Symbol	Typical Value	Unit
Core Diameter	$\varnothing_{\text{CORE}}$	220	μm
Fiber Numerical Aperture	NA	0.22	-
Standard fiber Length	L	50	cm
Connector at the fiber end ¹	-	SMA-905 / ST / FC / no connector	-
Minimum Bend Radius	d	100	mm

¹ Standard connector: SMA-905. Receptacle model and other fiber specifications available on request.

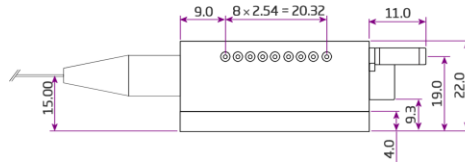
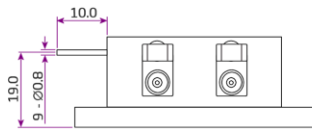
Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
LD Reverse Voltage	V_{RLD}	0	V
LD Forward Current	I_{FLD}	0.7	A
Output Power	P_{OPT}	2.5	W
Laser Diode Temperature	T_{LD}	10...15	°C
Ambient Temperature	T_{AMB}	30	°C
Storage Temperature	T_{STG}	-20...50	°C

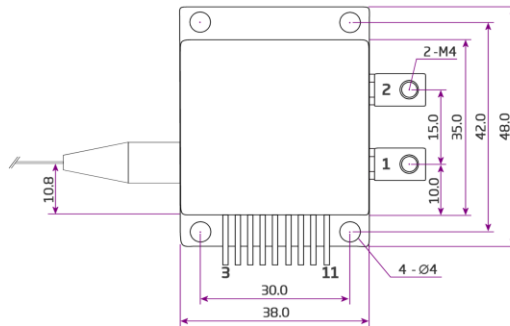
Package Information

The footprint of the package is 38 x 48 mm, and the height is 22 mm.

Fiber-coupled package, with TEC



1. LD (+)
2. LD (-)
3. TEC (-)
4. -
5. -
6. PD (N)
7. PD (P)
8. -
9. thermistor
10. thermistor
11. TEC (+)



Safety Information

- The laser light emitted from this laser device is visible and 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.

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