



LIGHTelligence

Moonstone™ Single and Multi-wavelength Optical Sources

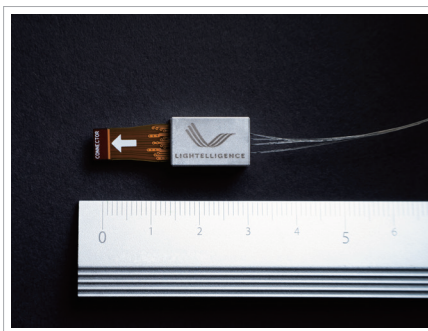
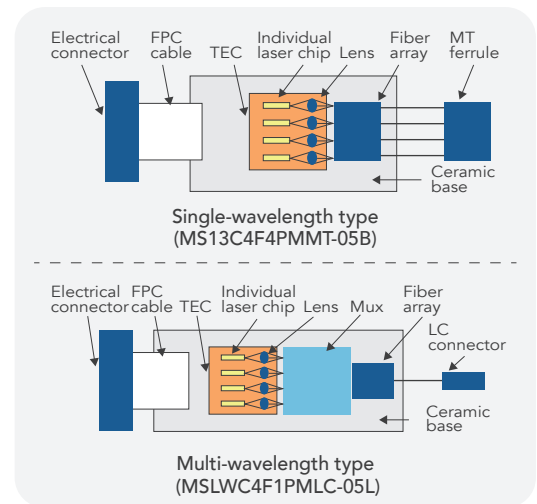
The Lightelligence Moonstone™ laser is small-footprint, high-power single or multi-wavelength optical source for a broad range of applications. Moonstone is a competitive laser source with up to 8 multiple wavelengths, high-power, and low-power consumption (i.e., $\geq 18\text{dBm}$ and $\leq 8\text{W}$ for single λ and $\geq 14\text{dBm}/\lambda$ and $\leq 4\text{W}$ for LWDM application), in addition to having excellent optical coupling and thermal control. The Moonstone laser is housed in a semi-hermetical package. The Moonstone laser module can be customized for different form factors.

Key Features

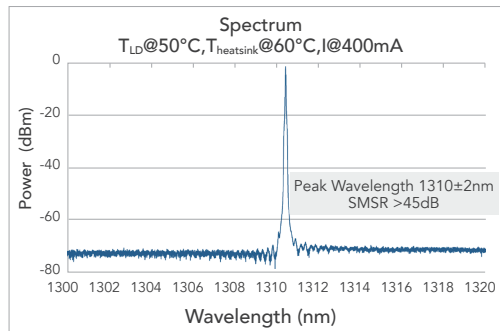
- Compact size
- Single or multi-wavelength (up to 8)
- LWDM O-band or custom
- High power output
- Low power consumption
- Excellent thermal solution
- FPC electrical interface
- Standard optical interface (SM/PM fiber; MT or LC/APC or others)

Applications

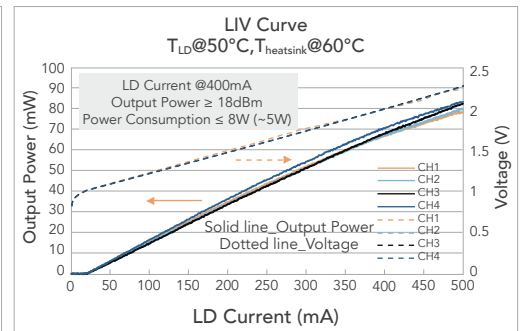
- Optical I/O
- LiDAR
- Optical computing
- Sensing
- Quantum computing



Single-wavelength Moonstone



Laser spectrum of single-wavelength Moonstone



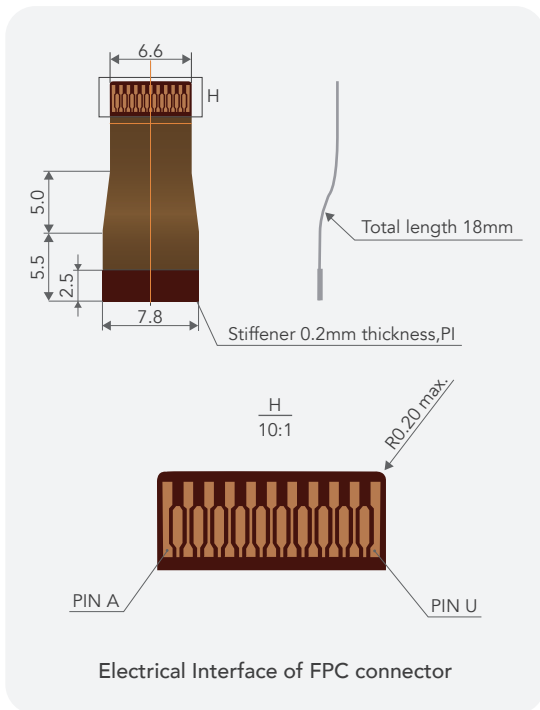
LIV curve of single-wavelength Moonstone

	Standard Specifications			Standard Specifications	
Single-wavelength MS13C4F4 PMMT-05B	Wavelength	1310nm/1550nm	Multi-wavelength MSLWC4F1 PMLC-05L	Wavelength	1295.56nm, 1300.05nm, 1304.58nm, 1309.14nm, or other wavelengths (LWDM MSA compliant)
	Output power	$\geq 18\text{dBm}/\text{fiber}$		Output power	$\geq 14\text{dBm}/\lambda/\text{fiber}$
	Power consumption	$\leq 8\text{W}$ (Heatsink temp at 60C)		Power consumption	$\leq 4\text{W}$ (Heatsink temp at 60C)
	Case size (mm)	$\leq 16*10*7$ (L x W x H)		Case size (mm)	$\leq 26*10*7$ (L x W x H)

*Note: Testing results for Multi-wavelength Moonstone is available upon request.



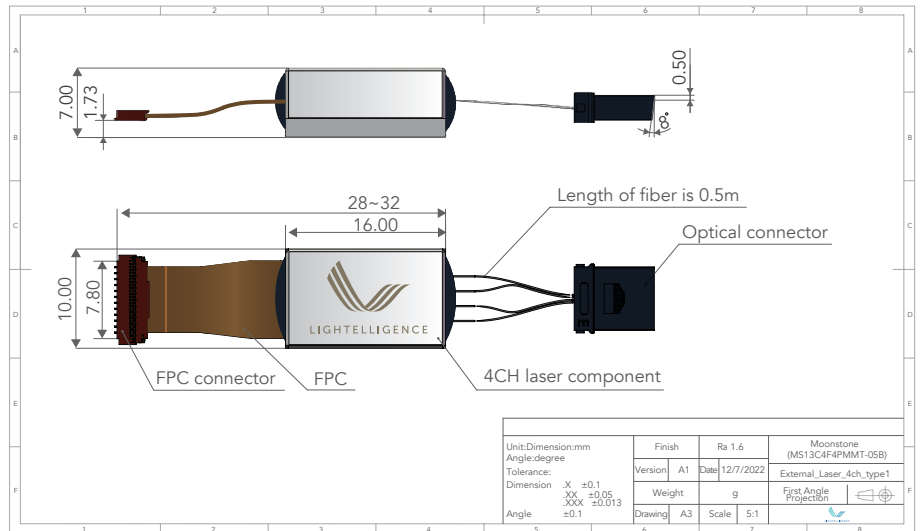
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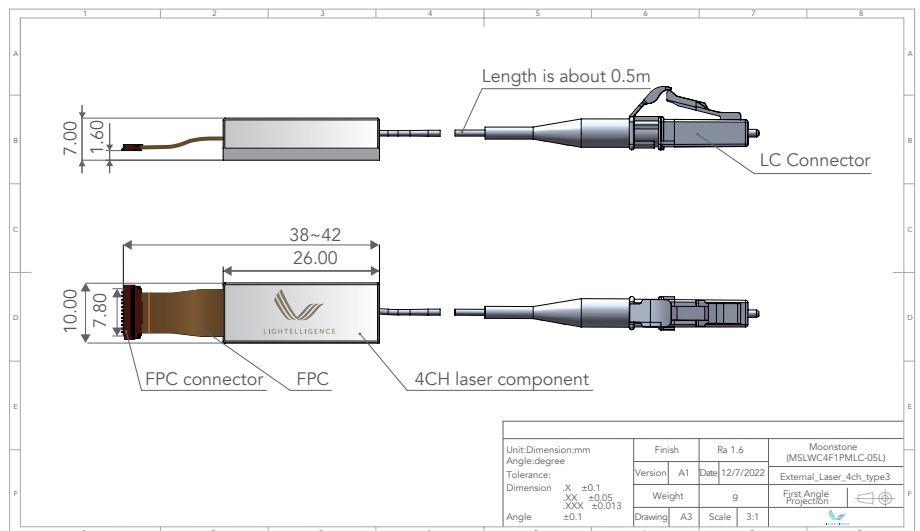
Electrical Interface of FPC connector

No.	NET	Current max.(A)
PIN A	Therm. +	0.01
PIN B	Therm. -	0.01
PIN C	LD1+	0.5
PIN D	LD1-	0.5
PIN EFG	TEC-	1.5
PIN H	LD2+	0.5
PIN I	LD2-	0.5
PIN JK	TEC-	1
PIN L	LD3+	0.5
PIN M	LD3-	0.5
PIN NOP	TEC+	1.5
PIN Q	LD4+	0.5
PIN R	LD4-	0.5
PIN STU	TEC+	1.5

Electrical Interface Pin Map



Moonstone MS13C4F4PMMT-05B



Moonstone MSLWC4F1PMLC-05L

FOR MORE INFORMATION

Visit www.lightelligence.ai and social media to stay up to date on our latest news



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