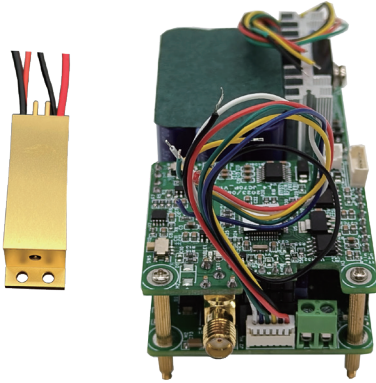


MCM Series

High Energy Microchip Laser



This series of microchip lasers are Reallight's self-developed, passively Q-switched diode-pumped solid-state lasers, featuring high energy, good value and low power consumption. The integrated design of diode-pumped module and laser crystal results in the compactness. And water cooling is not required for this laser. This series is also available with miniaturized drive boards for OEM control for applications include LIBS and laser ablation, which is easy to install and integrate, and is suitable for handheld devices.

Key Features

- ◆ Pulse width < 3ns
- ◆ Pulse energy > 10mJ
- ◆ Compact size, no water cooling required
- ◆ Suitable for handheld devices
- ◆ Cost effective

Applications

- Laser ablation
- Laser-induced breakdown spectroscopy (LIBS)
- Optical damage threshold testing

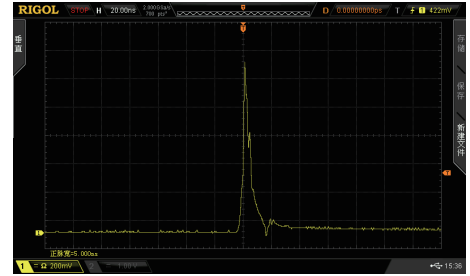
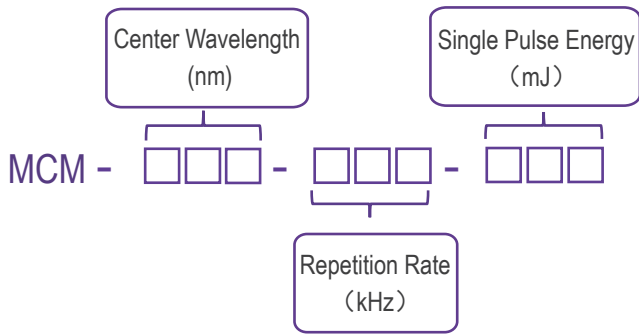
Technical Specifications

Optical Parameters			
Part Number		MCM-1064-0.1-0.5	MCM-1064-0.01-10
Wavelength(nm)		1064	1064
Repetition rate(Hz)		100	10
Pulse energy (mJ)		>0.5	>10
Pulse width (ns)		<3	<3
Power stability (RMS)		<3%	<3%
Full angle divergence Typ. (mrad)	Horizontal @1/e ²	4	3
	Vertical @1/e ²	4	3
Cooling method	air cooling		
Laser dimensions (W×H×L,mm)	17×16.1×58.5(customizable)		
Operation temperature (°C)	15~35		
Storage temperature (°C)	-20~60		
Driver Parameters			
Supply power voltage	24VDC		
Control interface	RS-232,I/O		
Power consumption (W)	15W (MAX)		
Drive board dimensions (W×H×L,mm)	45×34×95		
Trigger mode	Trigger In/Out		

Order Information

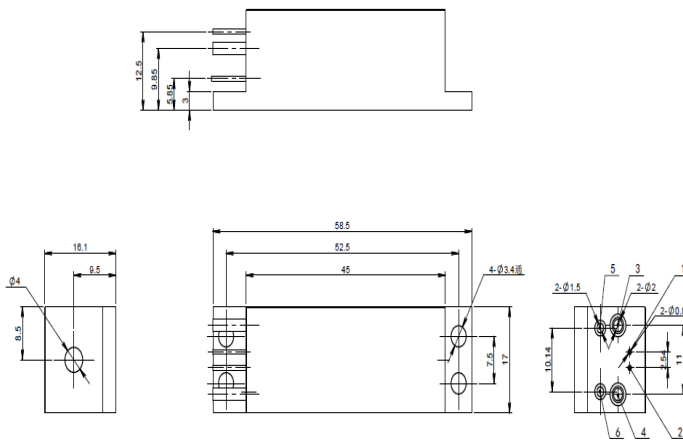
Wavelength (nm)	Part Number	Repetition rate(kHz)	Pulse energy(mJ)
1064	MCM-1064-0.1-0.5	0.1	0.5
	MCM-1064-0.01-10	0.01	10

Part Numbering Schema



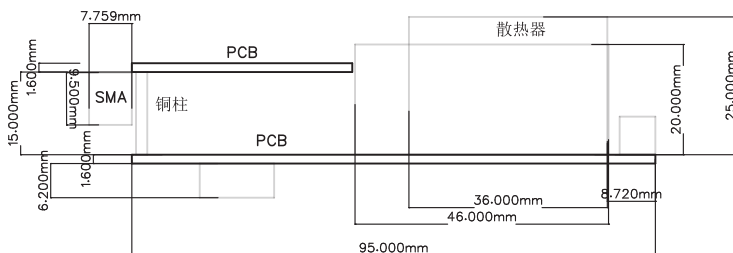
Typical pulse width

Mechanical Drawings (in mm)



Laser Head

PIN	Function	PIN	Function
1	RT	2	RT
3	LD(+)	4	LD(-)
5	TEC(-)	6	TEC(+)



Board

