

# MCC Series

## 750ps Microchip Laser



### Key Features

- ◆ Single pulse energy up to 120μJ
- ◆ Repetition rate up to 10kHz
- ◆ Spatial mode TEM<sub>00</sub>
- ◆ Polarization-stable
- ◆ A wide range of wavelengths

### Technical Specifications

### Applications

- Seed laser
- Micromachining
- Pump source for optical parametric oscillators
- Laser-induced breakdown spectroscopy (LIBS)
- Laser-based ultrasound detection
- Laser ionization mass spectroscopy (LIMS)
- Laser ranging
- Laser-induced fluorescence (LIF)
- Laser ultrasonic imaging
- Laser ablation
- Nonlinear optical measurement

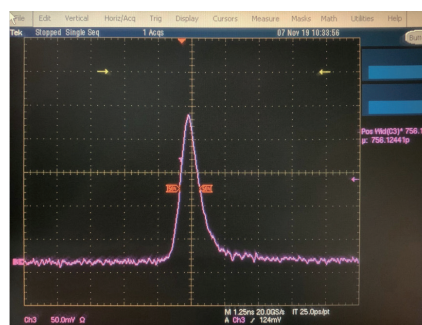
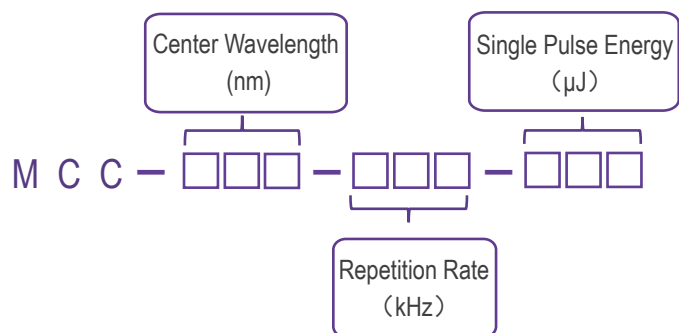
Optical Parameters													
Wavelength (nm)	1064			532			355			266			213
Repetition rate (kHz)	1	5	10	1	5	10	1*	5*	10*	1*	5*	10*	1*
Average power (mW)	100	300	300	50	150	150	20	50	50	10	40	40	4
Pulse energy (μJ)	100	60	30	50	30	15	20	10	5	10	8	4	4
Pulse width (ps)	750			700			650			650			650
Power stability (8h)	±3%												
Beam profile	TEM <sub>00</sub>												
Beam full divergence (typ., mrad)	Horizontal @1/e <sup>2</sup>	8	12	7	10	5	8	5	8	5	8	5	5
	Vertical @1/e <sup>2</sup>	8	12	7	10	5	8	5	8	5	8	5	5
Polarization ratio	>100:1												
System Parameters													
Supply power voltage	100-240 VAC, 50/60 Hz												
Control interface	RS232, USB												
Power consumption (W)	≤25	≤20	≤30	≤25	≤30	≤35	≤25	≤25	≤30	≤25	≤30	≤30	≤25
Power dimensions (W×H×L,mm)	168×88×140												
Laser dimensions (W×H×L,mm)	45×30×120												
Operation temperature (°C)	15-35												
Storage temperature (°C)	0-60												

1. \*Laser head features side laser outlet, please see mechanical drawings for more details.
2. Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.
3. As products are constantly being updated, the right of final interpretation of technical specifications or illustrations in datasheet belongs to RealLight.

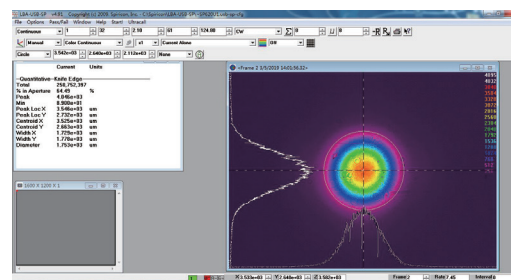
## Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy ( $\mu\text{J}$ )
1064	MCC-1064-1-100	1	100
	MCC-1064-5-060	5	60
	MCC-1064-10-030	10	30
532	MCC-532-1-050	1	50
	MCC-532-5-030	5	30
	MCC-532-10-015	10	15
355	MCC-355-1-020	1	20
	MCC-355-5-010	5	10
	MCC-355-10-005	10	5
266	MCC-266-1-010	1	10
	MCC-266-5-008	5	8
	MCC-266-10-004	10	4
213	MCC-213-1-004	1	4

## Part Numbering Schema

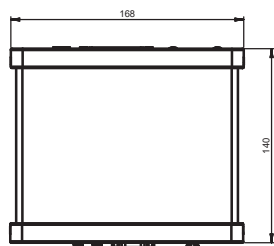
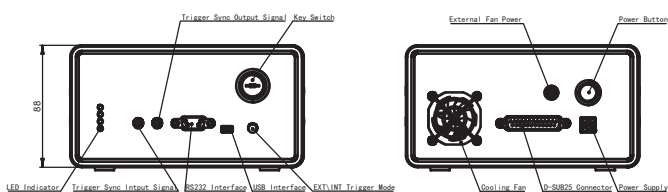


Typical Pulse

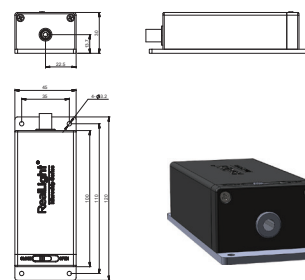


Beam Profile

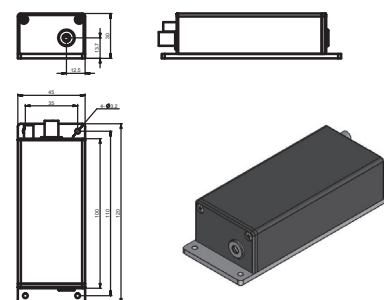
## Mechanical Drawings (in mm)



Power Supply



Laser Head (middle laser outlet)



Laser Head (side laser outlet)

