

MCJ Series

1ns Microchip Laser



Applications

Material micromachining
Spectrum analysis
LIDAR
Pump source
Biomedicine

Key Features

- ◆ Pulse width down to 1ns
- ◆ Single pulse energy up to 100μJ
- ◆ Repetition rate up to 2kHz
- ◆ Spatial mode TEM₀₀

Technical Specifications

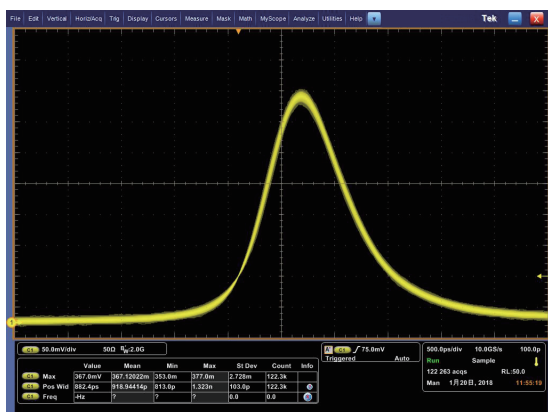
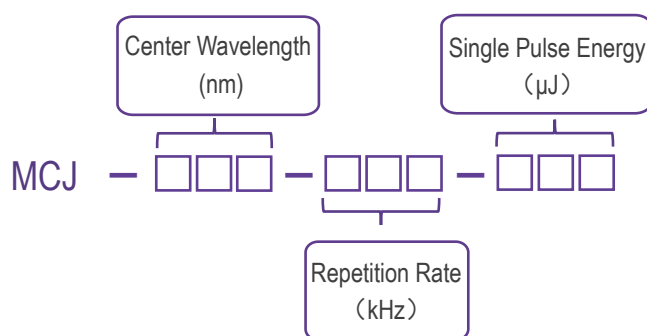
Optical Parameters					
Wavelength (nm)		1030	515	343	257
Repetition rate (kHz)		1	1	1*	1*
Average power (mW)		100	40	20	8
Pulse energy (μJ)		100	40	20	8
Pulse width (ps)		1000	900	800	800
Power stability (RMS, @8h)		<3%			
Beam profile		TEM ₀₀			
Beam full divergence (typ., mrad)	Horizontal @1/e ²	6	4	3	2
	Vertical @1/e ²	6	4	3	2
Polarization ratio		>100:1			
System Parameters					
Supply power voltage		100~240 VAC, 50/60 Hz			
Control interface		RS232, USB			
Power consumption (W)		≤45			
Power dimensions (W×H×L,mm)		180×102×180			
Laser head dimensions (W×H×L,mm)		45×33×120			
Operation temperature (°C)		15~35			
Storage temperature (°C)		0~60			

1. *Side laser outlet configuration (middle laser outlet configuration unless otherwise stated) .
2. Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.
3. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

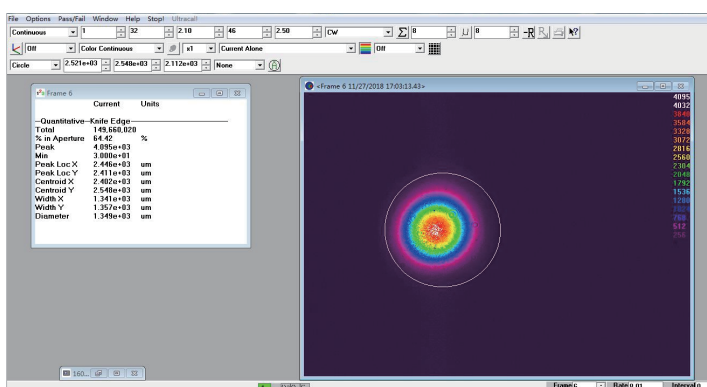
Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1030	MCJ-1030-1-100	1	100
515	MCJ-515-1-40	1	40
343	MCJ-343-1-20	1	20
257	MCJ-257-1-8	1	8

Part Numbering Schema

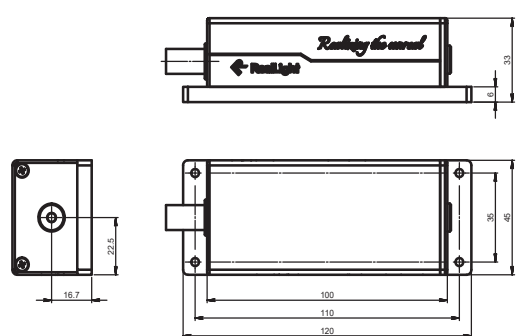


Typical Pulse

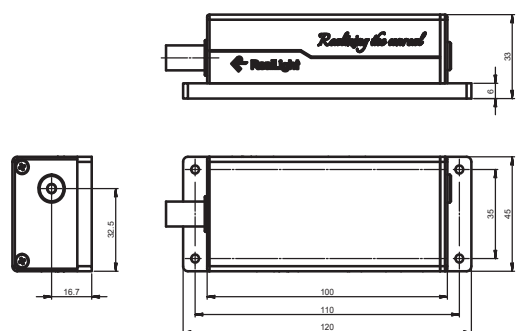


Beam Profile

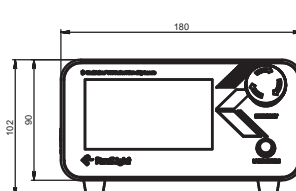
Mechanical Drawings (in mm)



Laser Head (middle laser outlet)



Laser Head (side laser outlet)



Power Supply

