

Microchip 1064 nm

Product Overview

- Microchips for passively Q-switched lasers
- Pump power dependent repetition rate with fixed pulse duration and pulse energy

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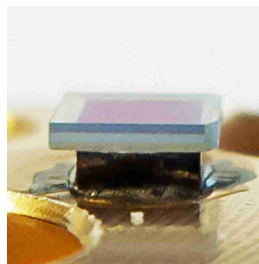
Microchip (MC) description

- Microchip: saturable absorber bonded to a Nd:YVO₄ laser crystal
- Pump power dependent repetition rate with fixed pulse duration and pulse energy
- Increasing repetition rate and average output power with raising pump power starting from the laser threshold

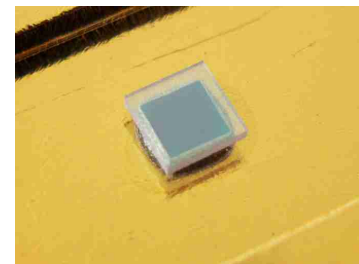
2 types of Microchips available

- MC - Microchip in reflection mode
- MCT - Microchip in transmission mode

MCT



MC

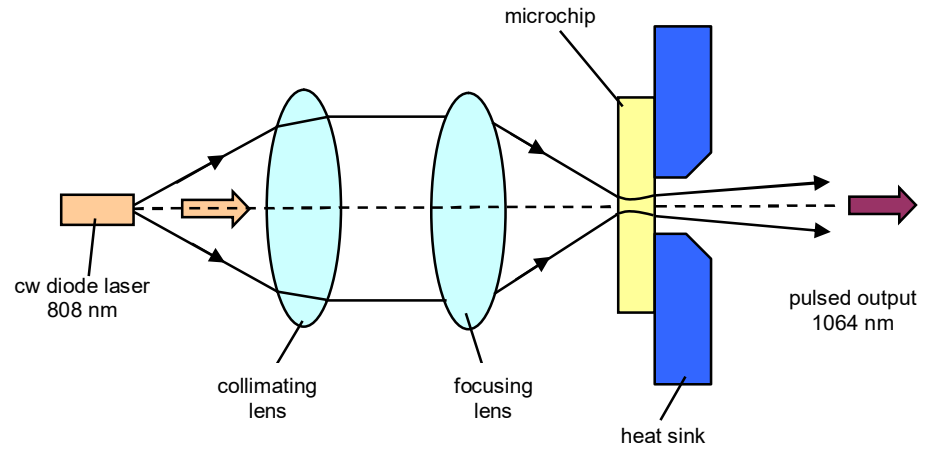


Laser emission	1064.3 nm \pm 0.3 nm, single mode, linear polarized	
Pump wavelength	808 nm	
Pulse energy	> 60 nJ	~ 20 nJ / 35 nJ
Pulse duration	100 ps \pm 30ps / 200 ps \pm 50ps	~ 90 ps / 220 ps
Max. output power	40 mW / 65 mW	20 mW / 30 mW
Repetition rate	\leq 200 kHz	50 – 800 kHz
Mounting	Copper heat sink 10 mm x 10 mm	Copper heat sink \varnothing 12.7 mm
Available types	MCT-1064nm-100ps MCT-1064nm-200ps	MC-1064nm-100ps MC-1064nm-250ps

Setup

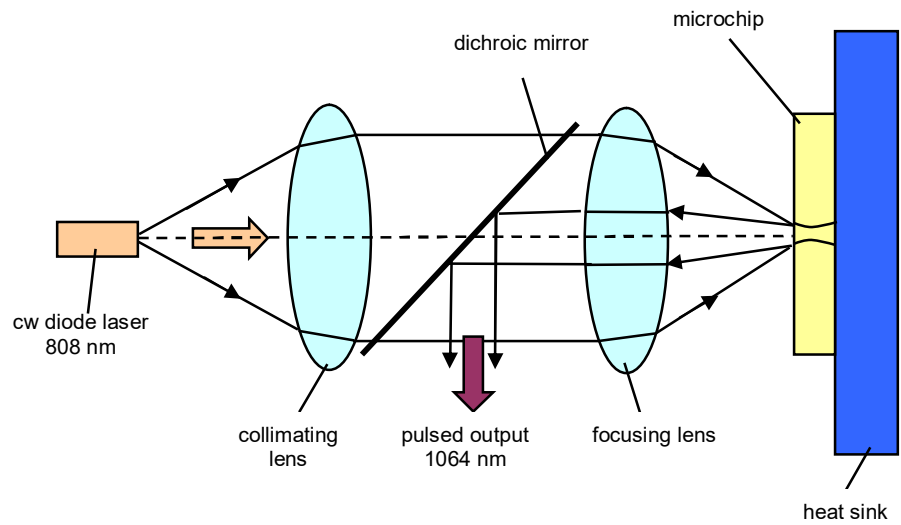
MCT-1064

in transmission mode

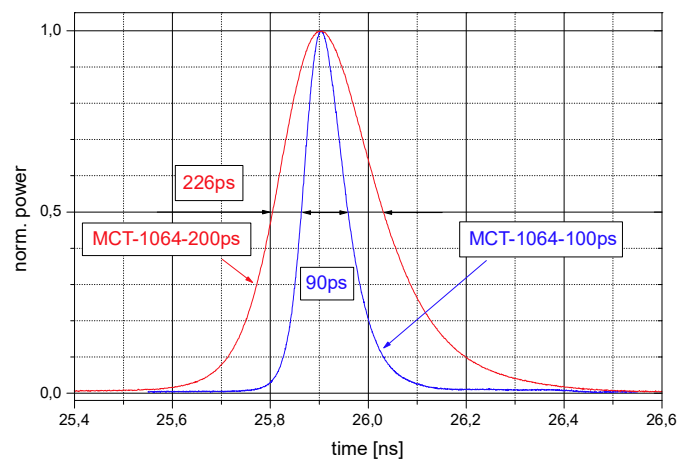
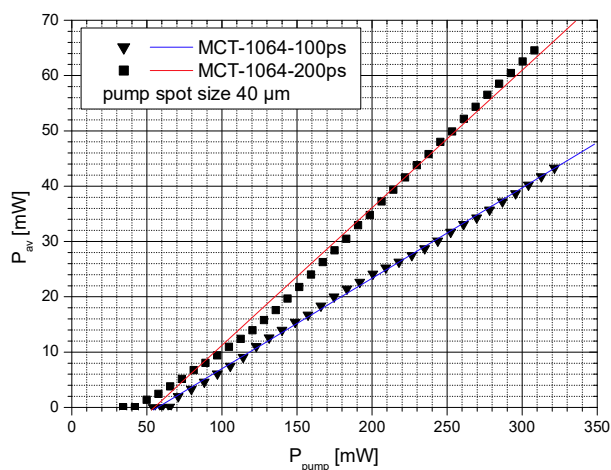


MC-1064

in reflection mode



Typical output MCT-1064



Application Examples

- Micromachining
- Light detection and ranging (LIDAR)
- Precision measurements
- Frequency conversion