

DATA SHEET

MPL-H-1053/30~50uJ/300-450mW

LD PUMPED ALL-SOLID-STATE Q-SWITCHED LASER

All solid state Q-switched laser at 1053 nm has the features of high peak power, high repetition rate, and short pulse duration, which is widely used in industry (marking on the diamond or stone), teaching of nonlinear optics, fiber communication, etc.







SPECIFICATIONS

Wavelength (nm)		1053 ± 1
Operating mode		Q-switched pulsed laser
Single pulse energy (µJ)		30~50
Pulse duration (ns)		~10
Peak power (W)		3000~10000
Rep. rate (kHz)	Controllable	Specified One rep. rate, such as 1k, 2k, 3k, up to 5kHz, with stable laser pulses emitting (stable pulse energy, peak, duration and period).
		Different rep. rate in the range of 1Hz-5kHz can be obtained by input an external TTL signal.
	Uncontrollable	Undefined rep. rate among 5k-30kHz and unstable laser pulse emitting. Suitable for the applications only needing high peak power pulses.
Average power (mW)		Average power (mW) = Single pulse energy (μ J) * Rep. rate (kHz)
Ave power stability (over 4 hours)		<1%, <3%, <5%
Transverse mode		Near TEM ₀₀
Warm-up time (minutes)		<10
M ² factor		<1.5
Beam divergence, full angle (mrad)		<2.0
Beam diameter at the aperture (mm)		~3.0
Beam height from base plate (mm)		29
Operating temperature (°C)		10~35
Power supply (90-264VAC)		PSU-H-FDA
Expected lifetime (hours)		10000
Warranty		1 year
	Operating mode Single pulse energy (µJ Pulse duration (ns) Peak power (W) Rep. rate (kHz) Average power (mW) Ave power stability (ov Transverse mode Warm-up time (minutes M² factor Beam divergence, full a Beam height from base Operating temperature Power supply (90-264V Expected lifetime (hour	Operating mode Single pulse energy (µJ) Pulse duration (ns) Peak power (W) Controllable Rep. rate (kHz) Uncontrollable Average power (mW) Ave power stability (over 4 hours) Transverse mode Warm-up time (minutes) M² factor Beam divergence, full angle (mrad) Beam diameter at the aperture (mm) Beam height from base plate (mm) Operating temperature (°C) Power supply (90-264VAC) Expected lifetime (hours)





