

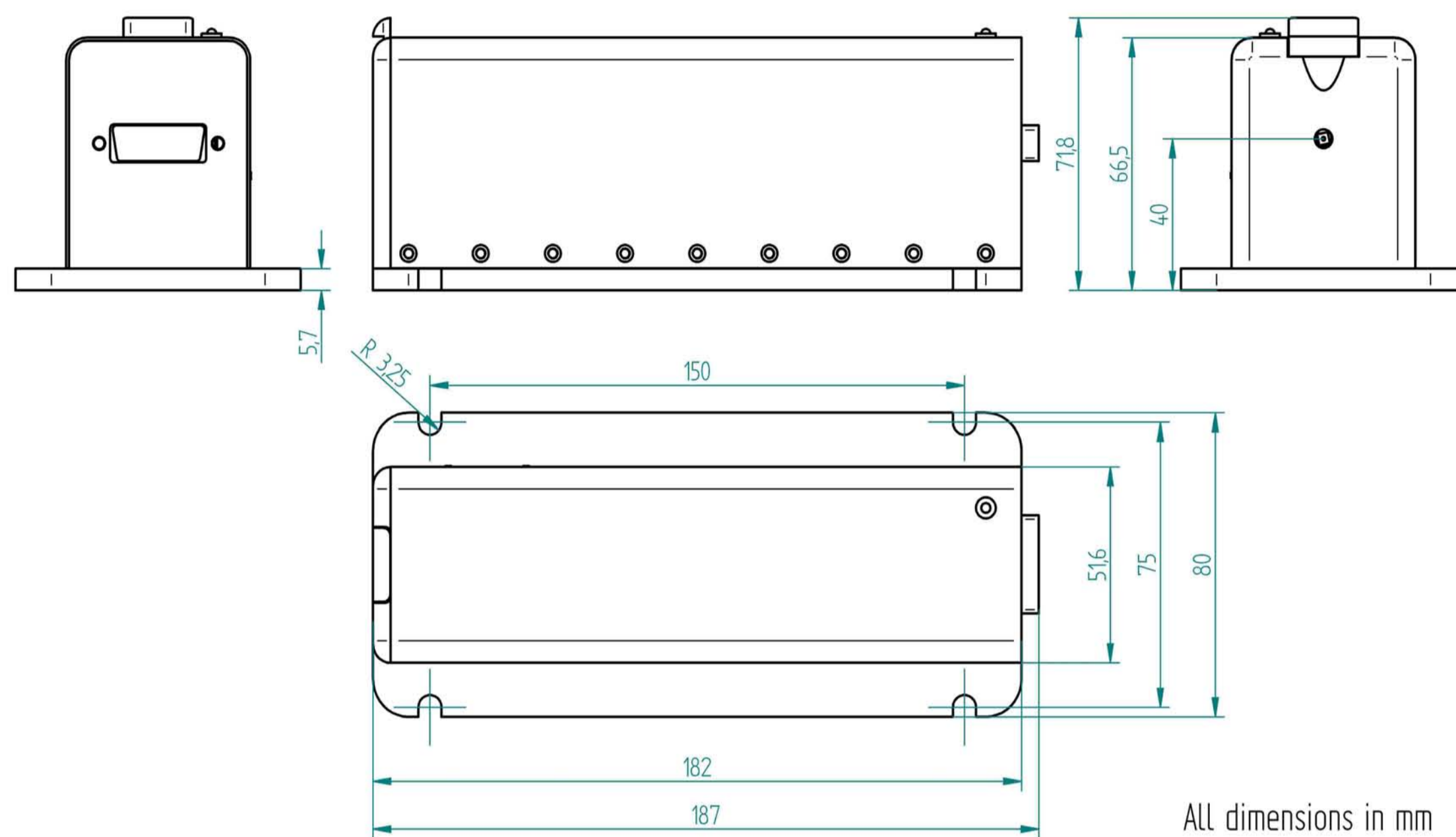
# 532-Q LASER OEM



## MAIN APPLICATIONS:

The 532 nm pulsed laser is designed for applications where high pulse intensity is needed. The “532-Q Laser” operates in single mode q-switched regime and generates more than 2 kW peak power in nanosecond pulses, although average power does not exceed a few hundred milliwatts. Such lasers are useful in micromachining, marking, Laser ranging, Laser remote sensing, Laser induced breakdown spectroscopy (LIBS), nonlinear optics, microscopy, photonic fiber pumping and as seeding master oscillator for high power solid state lasers.

Dimension Diagram: 532-Q Laser head



## MAIN FEATURES:

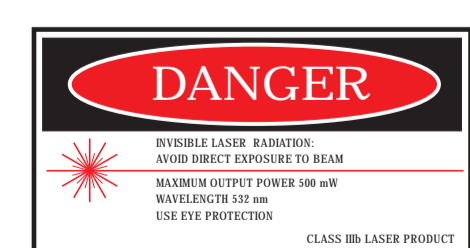
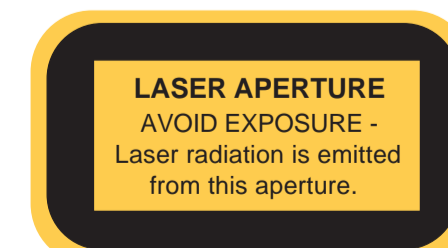
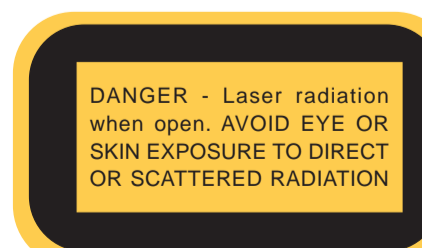
- Monolithic cavity design
- Longitudinal single mode operation
- Passively q-switched
- Peak power ~ 2.4 kW
- Pulse length ~ 2 ns
- Pulse energy ~ 4.5 μJ
- Variable repetition rate
- Trigger input / trigger output
- Transversal beam: TEM<sub>00</sub>
- Compact and rugged size housing

532-Q Laser OEM ns pulsed 532 nm LASER	
Wavelength	532 nm
Laser material	Nd:YAG
Q-switch material	Cr4+:YAG
Average power *	> 50 mW
Pulsewidth	~ 2 ns
Divergency (half angle) ; typ.	~ 3 mrad
Beam waist (diameter)	~ 110 μm
Repetition rate *	0 - 27 kHz
Pulse to pulse jitter (rms) at 20 kHz measured	~ 3 %
Beam quality M <sup>2</sup>	< 1,2
Extinction ratio of polarization	> 100 : 1

\* depends on power rate and internal absorber start transmission



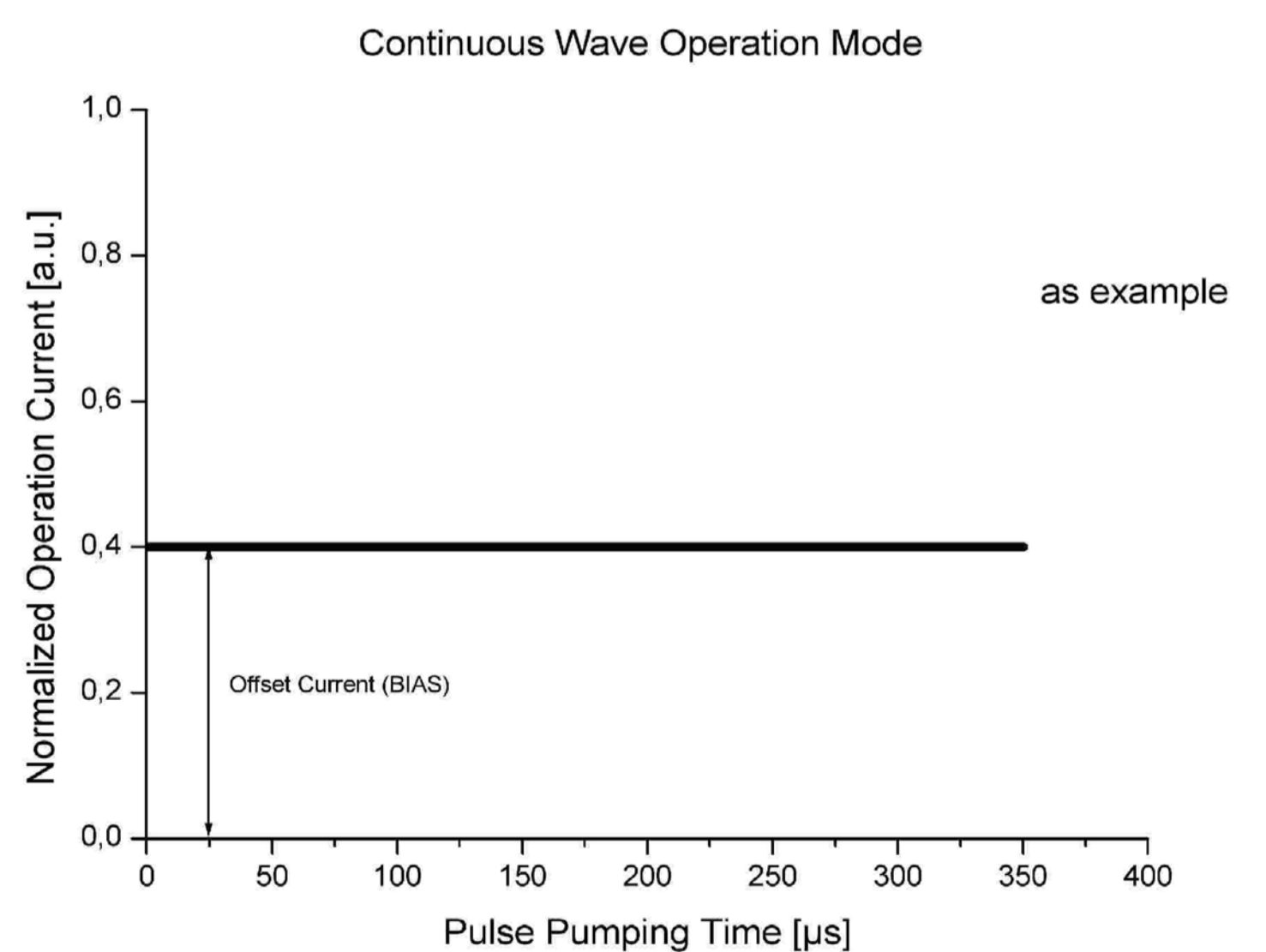
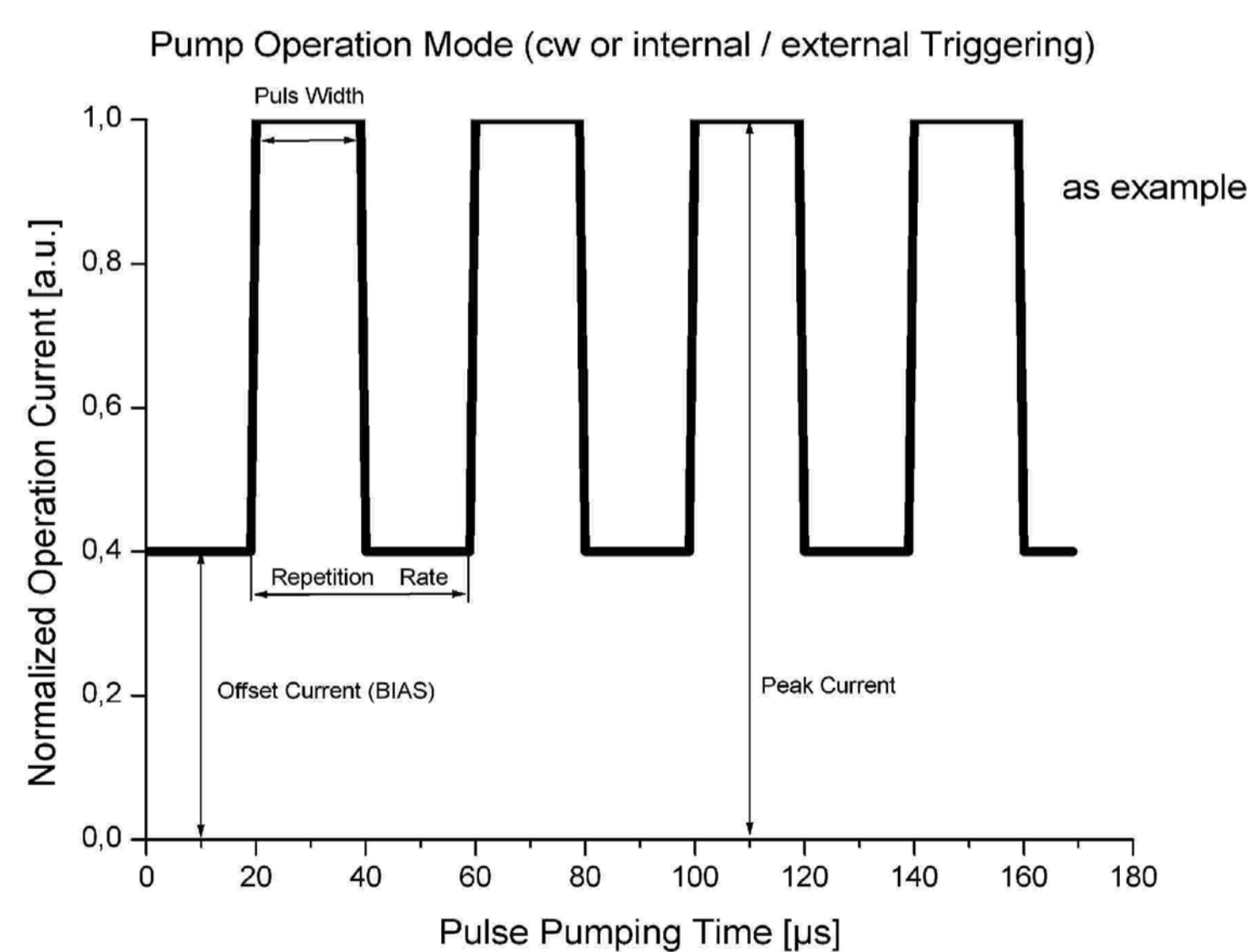
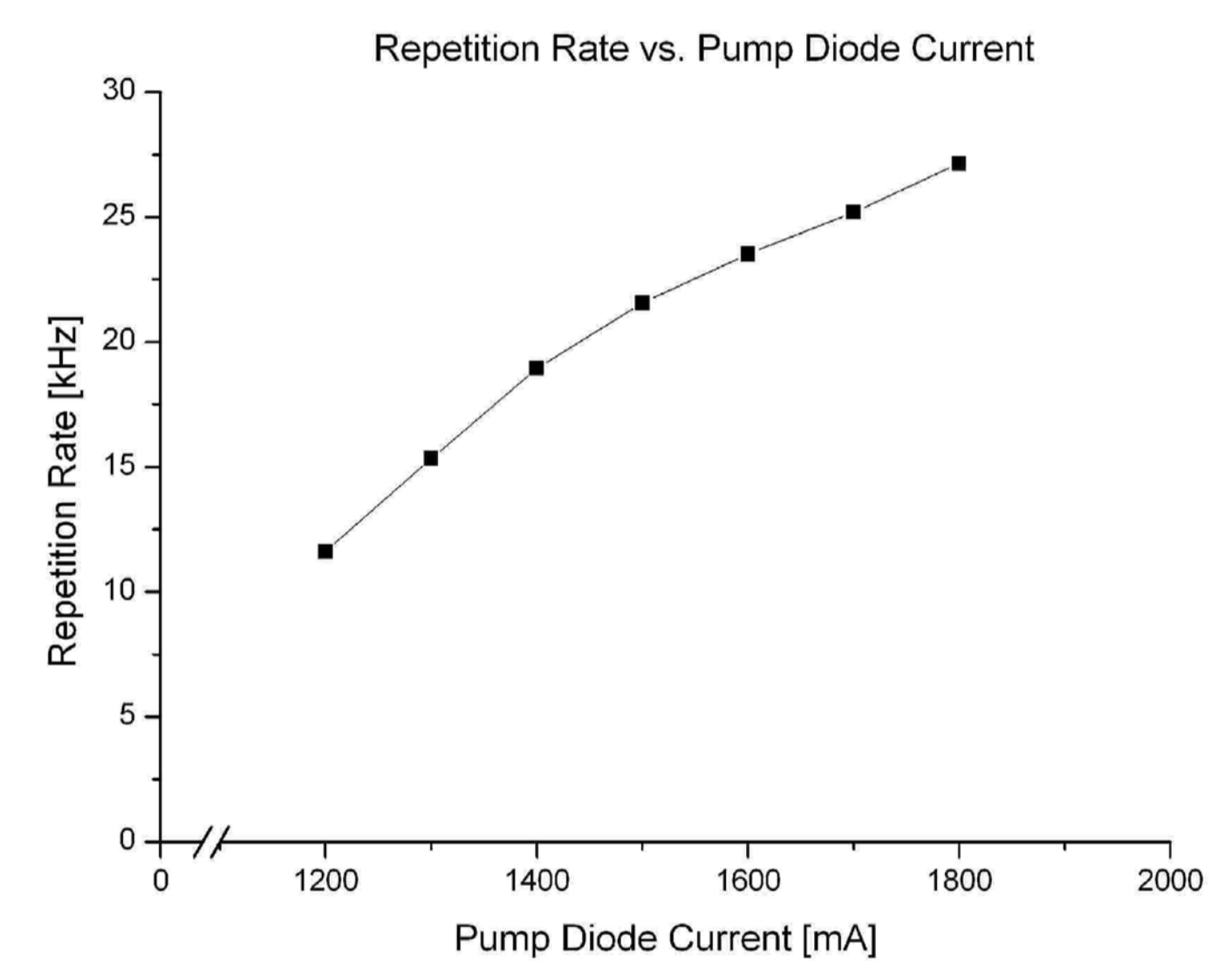
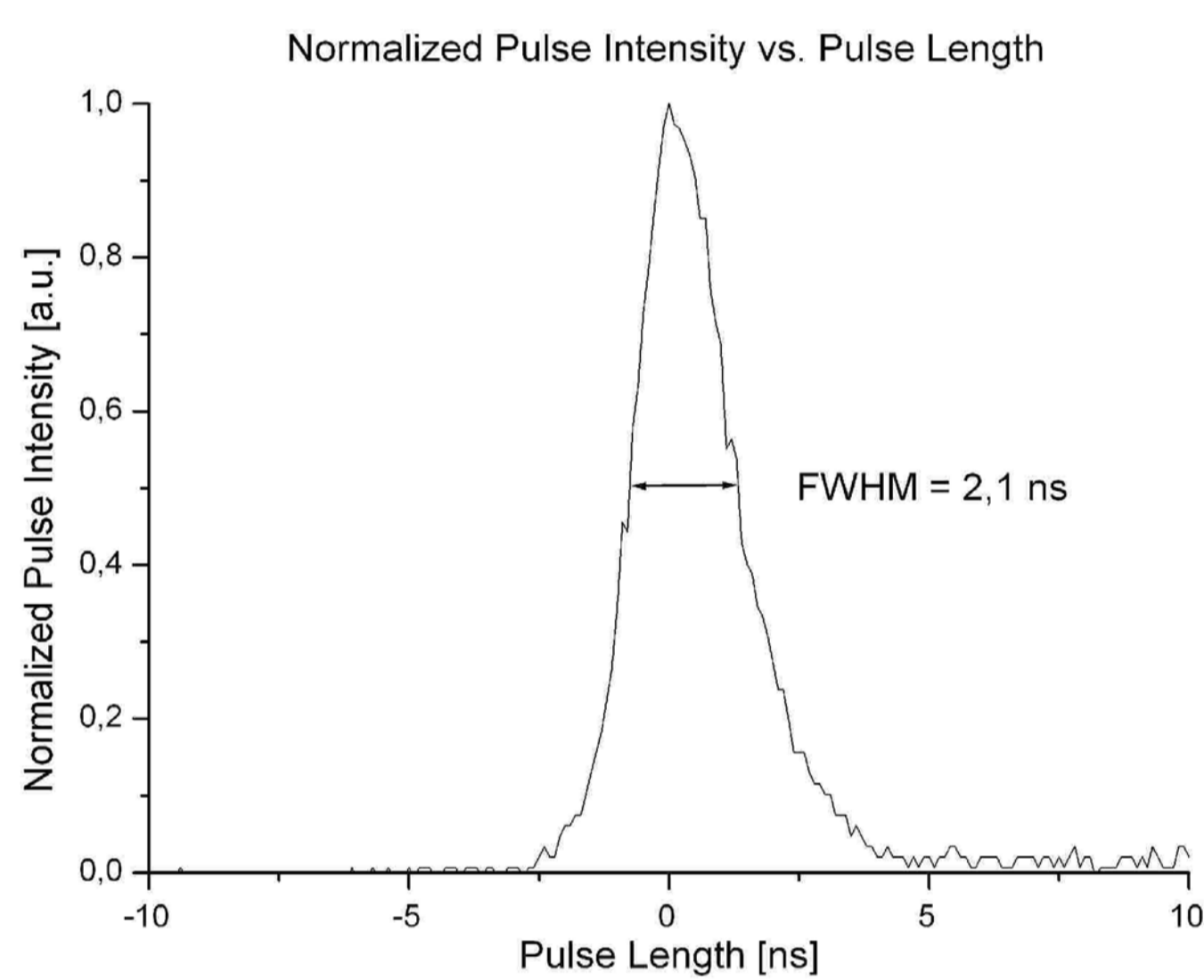
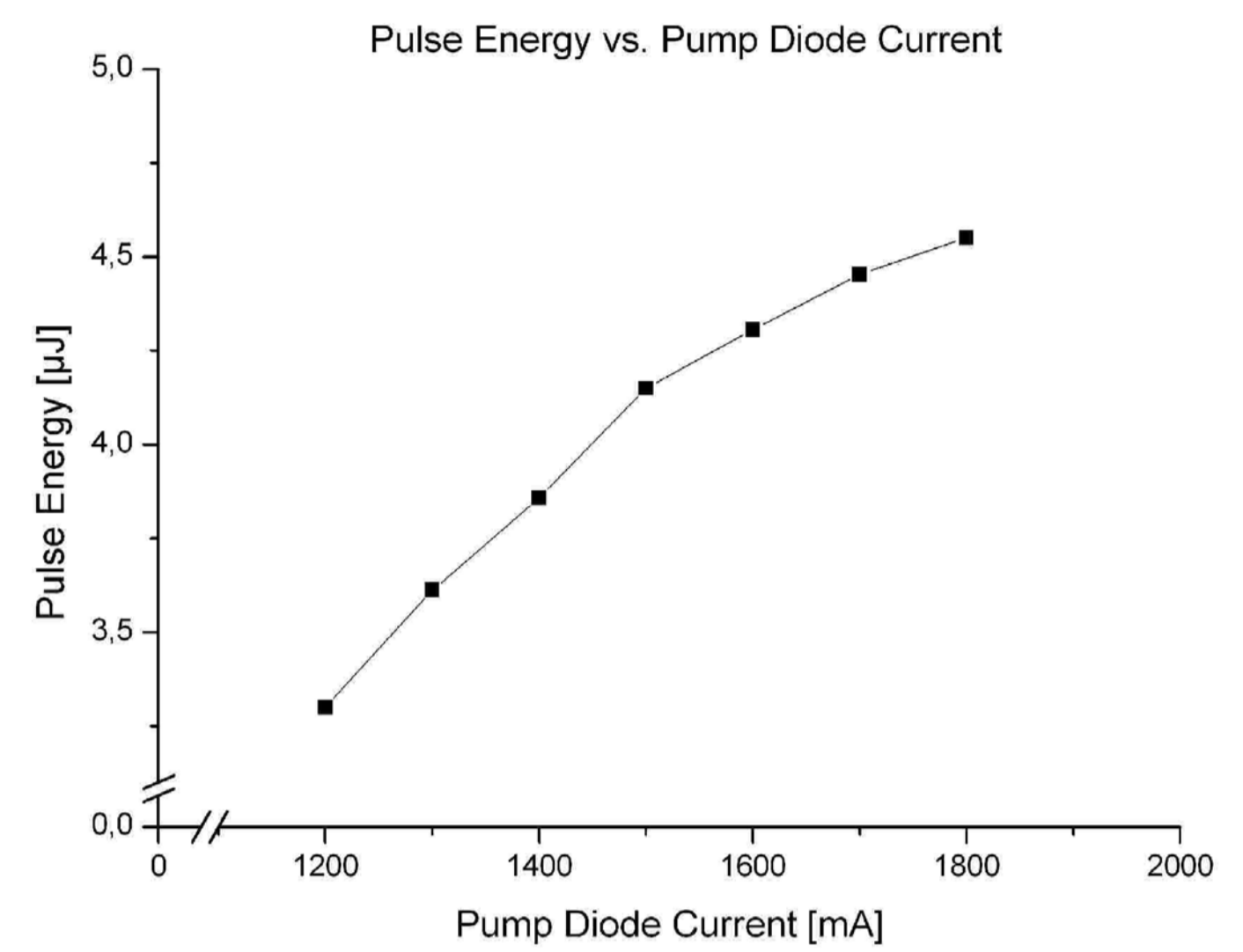
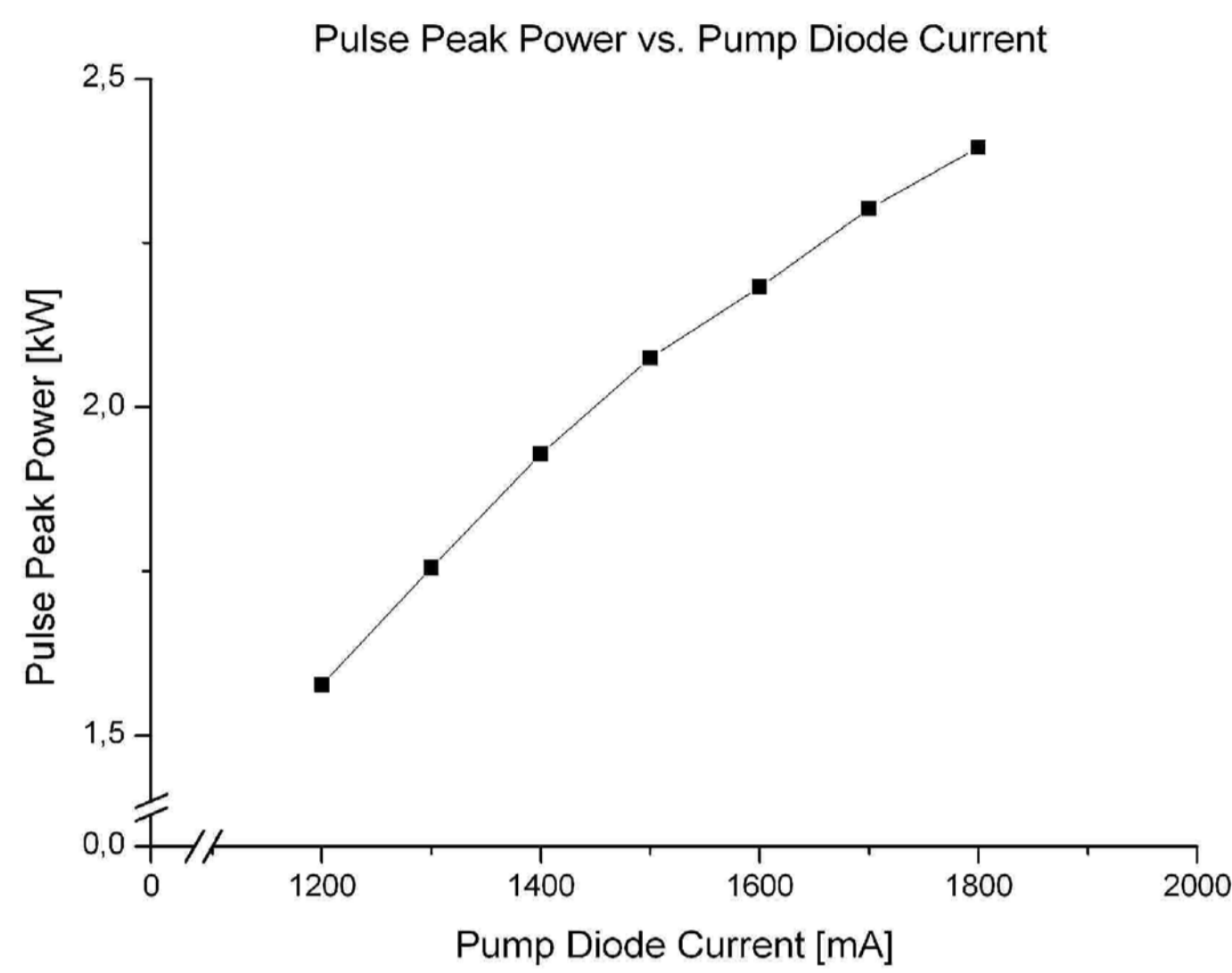
The 532-Q Laser system is a OEM version of a Impex HighTech GmbH diode-pumped solid state laser. As such, it is intended only for integration into other equipment. The 532-Q Laser does not comply with Center for Devices and Radiological Health (CDRH) standards. The customer is responsible for CDRH certification of any system that incorporates the 532-Q Laser.



# 532-Q LASER OEM

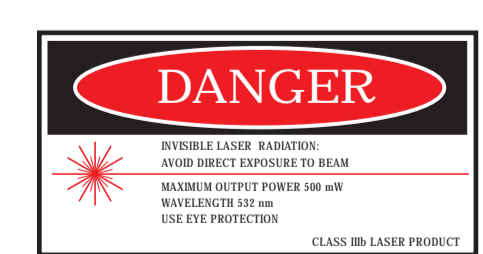
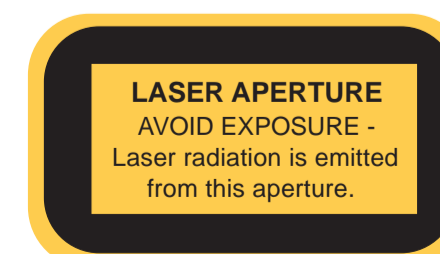
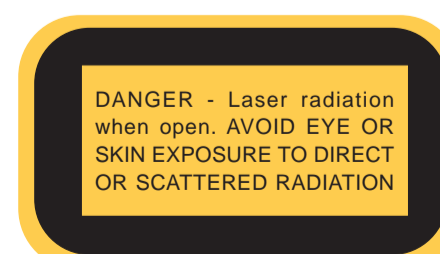


## OPTICAL PROPERTIES:



Impex HighTech follows a policy of continuous improvement of its products. Specifications are subject to change without notice.

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