

Disk Pulsed Fiber Laser

Product Description:



This product is a 1550nm pulsed fiber laser that needs to exhibit characteristics such as narrow pulse width, high monochromaticity, a wide operating temperature range, high operational stability, and a broad frequency tuning range. It should also have a high electrical-optical conversion efficiency, low ASE noise, and low nonlinear effects. It is primarily used as a laser radar source for detecting information about spatial target objects, including their distance and reflective properties.

Technical Data:

Parameters	Unit	Min.	Typical	Max.	Description
Operating Mode		Pulsed			
Center Wavelength	nm	1548	1550	1558	
Pulse Width (FWHM)	ns	1	3	10	Adjustable
Repetition Frequency	kHz	50	500	2000	Adjustable
Average Power	mW		750		
Peak Power	kW			3	
Spectral Distribution	%		95		Spectral content within CWL ± 1 nm at 3 ns, 500 kHz.
Polarization Extinction Ratio (PER)	dB		20	23	
Polarization State	NA	Random			
Trigger Mode	NA	External Trigger			
Electro-optical Delay (from electrical trigger to output)	ns	90		100	
Opto-optical Delay (from monitoring light to main output)	ns	50		70	
Electrical Power Consumption	W			24	Within the working Temp.
Operating Voltage	V	9	12	13	
Operating Temperature	°C	-40		65	Laser shutdown at 95°C.
Storage Temperature	°C	-40		85	
Dimensions	mm	$\phi 90 \times 24.5$			
Weight	g			100	
Optical Output Mode		FC/APC, FC/UPC			Customizable fiber collimated output.
Output Fiber Length	mm		340		Without fiber connectors.
Electrical Interface Model		TE 1-215079-4			
Output Power Stability (RMS)	%			5	Operates for 8 hours at room temperature.