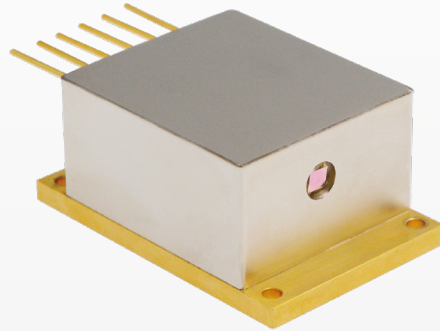


II-VI



DPQL-1064-F-0015-001N-06-NK-A
Q-Switched 1064 nm Laser

PRODUCT OVERVIEW

The DPQL-1064 is a laser module that integrates a 1064 nm Q-switched laser head, a temperature controller, and a thermal sensor that monitors temperature control in real time. The laser generates a 1064 nm laser pulse at a stable repetition rate without external pulse input.

Features

- High repetition rate
- Internal TEC and thermistor
- High reliability
- Free space output

Applications

- Seed lasers
- Frequency conversion

Q-Switched 1064 nm Laser

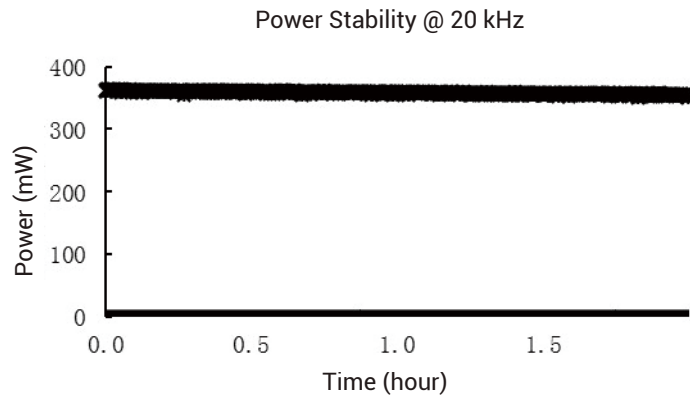
Product Specifications

Parameter	Min	Typical	Max	Conditions
Optical				
Wavelength	-	1064 nm	-	
Pulse Width	-	-	1 ns	
Peak Power	12 kW	-	-	
Pulse Repetition Frequency	20 kHz	-	-	
Average Power	300 mW	-	-	
Operating Temperature (TEC)	Operating temp. recommended in the test sheet			
Power Stability	-3%	-	3%	2 h @ rated power
Beam Divergence	-	15 mrad	20 mrad	
Polarization Ratio	Random			
Electrical				
LD Working Current	-	3500 mA	4500 mA	
LD Working Voltage	-	1.9 V	2 V	
TEC Working Current	-	-	3.7 A	
TEC Working Voltage	-	-	9.2 V	
Warm-up Time	-	-	2 min	
Mechanical				
Package Dimension	45 mm x 30 mm x 20 mm			
Off Center (horizontal)	-	-	17.5 mrad	
Off Center (vertical)	-	-	8.75 mrad	
Reliability				
Storage Humidity	5%~85% RH ¹			
Storage Temperature	-40 to 80°C			
Shock	150 m/s ² , 6 ms, semi-sinusoidal, 4000 shocks, z-axis			
	75 m/s ² , 6 ms, semi-sinusoidal, 1000 shocks, x,y-axis			
Vibration	Amplitude, ±0.75 mm; 10 to 57 Hz sinusoidal; 20 cycles per axis; acceleration, 1 g; 57 to 500 Hz sinusoidal; sweep rate, 1 oct/min			
Expected Lifetime (MTTF)	5000 h	-	-	At rated power & room temp.

¹Non-condensing.

Q-Switched 1064 nm Laser

Typical Output Performance



Dimensions and Pin Configuration (Unit: mm)

