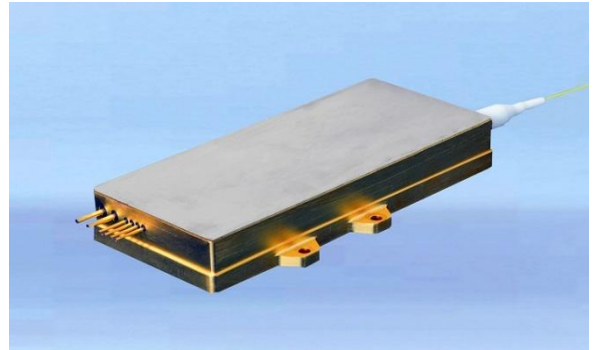


793nm Fiber-coupled Diode Laser

By adopting specialized fiber-coupling techniques, the manufactured diode laser modules have a high efficiency, stability and superior beam quality. The modules are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspection and burn-in procedures guarantee reliability, stability and long lifetime of each modules.



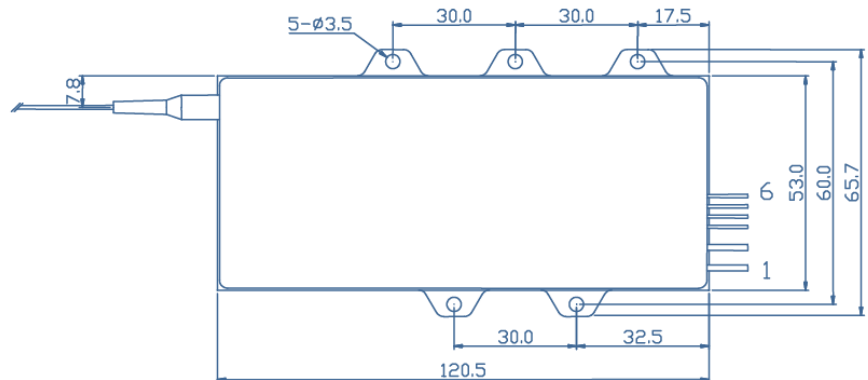
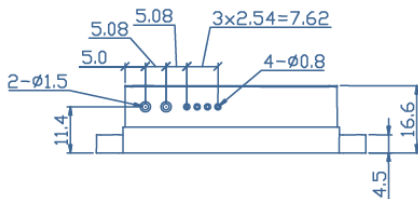
Features

- 40W and 80W CW output power
- Optional thermistor and photodiode

Applications

- Fiber laser pumping

Package dimension (mm)



Pin	Function
1	Laser diode +
2	Laser diode -
3	Photo diode (N)
4	Photo diode (P)
5	Thermistor
6	Thermistor



Module Specifications

Model		M793±3-40-F105/22-DK	M793±3-80-F200/22-DK
Optical Parameters		Unit	
Output Power	W	40	80
Central Wavelength	nm		793
Wavelength Tolerance	nm		± 3
Spectral Width (90% power)	nm		< 3.0
Wavelength Temp. Coefficient	nm/°C		0.3
Fiber Parameters			
Fiber Core Diameter	µm	105	200
Numerical Aperture		0.22	0.22
Bare Fiber Length	m		1 - 2
Electric Parameters			
Threshold Current (typical)	A	0.5	0.7
Operating Current (typical)	A	3.0	5.5
Operating Voltage (typical)	V	30.0	35.0
Slope Efficiency (typical)	W/A	16.0	16.7
Power Conversion Efficiency (typical)	%	44	42
Accessories			
Monitor Photodiode			optional
Thermistor			optional NTC10k
Other Parameters			
Operating Temperature	°C		20 – 35
Operating Humidity	%		< 75
Storage Temperature	°C		-20 – +80
Soldering Temperature	°C		250 (10s)

- Notes: 1. Module specifications and dimension are subject to change without notice.
 2. ESD precautions must be taken.
 3. The minimum fiber bend diameter should be 300 times greater than the fiber core diameter.
 4. Reduced lifetime if improperly used or used above operating conditions.
 5. A non-condensing environment is required for storage and operation below the ambient dew point.

Compliance with Regulatory Requirements: This industrial laser is an OEM version of a laser diode. As such, it is intended only for integration into other equipment. This laser does not comply with IEC and CDRH requirements. The customer is responsible for IEC and CDRH certifications of the system that incorporates this industrial laser.

