

976nm, 400μm, Conduction-Cooled, Single Bar, Fiber-Coupled Module

Features

- High coupling efficiency
- High brightness
- Sealed housing
- Standard fiber coupling (HP-SMA) for 400μm NA 0.22



Device Specification

Optical Parameters ¹	Units			QCW
Center Wavelength Range ³	nm	976	976	976
Center Wavelength Tolerance	nm	±3	±3	±5
Output Power ²	W	30	50	100 ⁵
Spectral Width (FWHM)	nm	4	4	5
Slope Efficiency	W/A	>0.8	>0.8	>0.85
Wavelength Temp. Coefficient	nm/°C	~0.38	~0.38	~0.38

Fiber Parameters

Numerical Aperture ⁶	NA	0.22
Fiber Core Diameter	μm	400
Fiber Connector	HP-SMA 905 with Free Standing Fiber Tips	

Electrical Parameters¹

Power Conversion Efficiency	%	>45	>45	≥40
Threshold Current (I _{TH})	A	<7.5	<13	<7.5
Operating Current (I _{OP})	A	<50	<60	<120
Operating Voltage (V _{OP})	V	<1.9	<1.9	<1.9

Thermal Parameters

Operating Temperature ^{3, 4}	°C	+20 to +30	+20 to +35	+20 to +30
Storage Temperature ⁴	°C	0 to +55	0 to +55	0 to +55
Recommended Heatsink Capacity	W	>70	≥90	>70

Optional

True unpolarized output is available as an option.

¹Data at 25°C cold plate temperature.

²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

⁴A non-condensing environment is required for storage and operation below the ambient dew point.

⁵QCW, 1msec 10Hz.

⁶Low numerical aperture option available at 0.12 for 800μm.

DILAS
The diode laser company.

(Optional monitor photo diode and temperature sensor/NTC)

