

Features:

- very high output power, up to 30 mW ex SM fiber, 60 mW free space
- three power categories
- negligible residual Fabry-Perot modulation depth
- very low secondary coherence subpeaks at full power

Packages:

- **fiber coupled:** Butterfly, DIL
- **free space:** TOW

Additional & customized:

- PD - monitors
- FC/APC terminated pigtailed
- PM pigtailed (polarized or Lyot-depolarized output)

Specifications

(Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Category	Min	Typ	Max
Output power, emitter @ +25 °C SLD-48-HP SM fiber pigtailed	HP1	-	-	10.0
	HP2	-	-	20.0
	HP3*	-	-	30.0
Output power, mW, emitter @ +25 °C Glass Window SLD-48-HP**	HP1	-	-	30.0
	HP2	-	-	45.0
	HP3*	-	-	60.0
Forward current, mA	HP1	-	130	200
	HP2	-	210	270
	HP3*	-	300	400
Forward voltage, V	All	-	-	2.8
Peak wavelength, nm	All	945	960	970
Spectrum width, FWHM, nm	HP1	25	35	-
	HP2	25	30	-
	HP3*	-	30	-
Residual spectral modulation depth, %	All	-	2.5	5.0
Secondary coherence subpeaks, dB (10 log)	All	-	-25	-
Slow / fast polarization ratio (PM "polarized modules"), dB***	All	5	10	-
Operation temperature range (case), °C****	All	-55	-	+75
Cooler current, A	All	-	-	1.2
Cooler voltage, V	All	-	-	3.5

- * SLD modules of HP3 power category are available in engineering quantity;
- ** TOW packaged SLDs;
- *** Lyot depolarized versions are available upon request
- **** Butterfly packaged SLDs

Attention: Spectrum peaked around 960 nm is not guaranteed if not specially requested!

Following marking should be used for **ORDERING**:

SLD-48(a)-(b)-(c)-(d)-(e)

Where:

a = 0 (free space) or 1 (fiber pigtailed)

b = power category (HP1, HP2, HP3)

c = package type

d = SM (isotropic) or PM (polarization maintain) fiber (pigtailed versions only)

e = PD (if PD monitor is required)

Example: SLD-481-HP1-DBUT-SM-PD

10⁻³ maximum feedback is allowed to run HP series SLDs safely at full power.

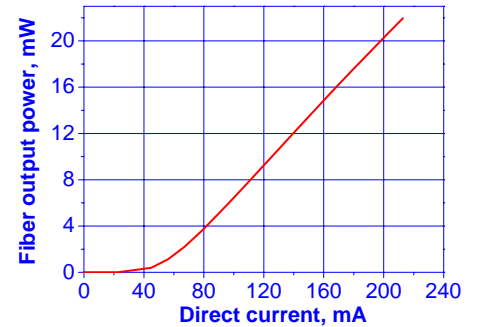
All specifications are subject to change without notice

Applications:

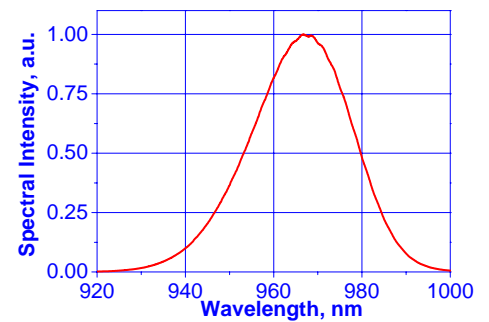
- optical sensing
- optical coherence tomography
- optical measurements

PERFORMANCE EXAMPLES

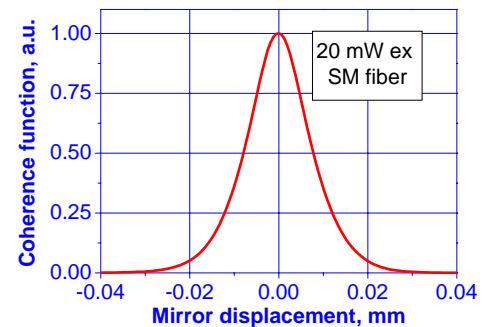
SLD-481-HP2-SM Light-current curve



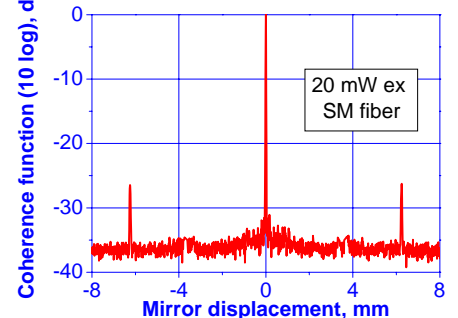
Spectrum example - 20 mW ex SM fiber



Short displacement



Extended displacement



Mirror displacement = Optical path difference / 2