

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 pseudo-depolarized output)

Specifications (Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Category	Min	Typ	Max
Output power, emitter @ +25 °C, SM fiber pigtailed SLD-48-HP, mW	HP1	-	-	10.0
	HP2	-	-	20.0
	HP3*	-	-	30.0
Output power, emitter @ +25 °C, Glass Window SLD-48-HP**, mW	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	-
Operating temperature (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;

*** Pseudo-depolarized versions (light is launched into the fiber with its polarization oriented at 45° to the birefringent axes) are available upon request

**** Butterfly packaged SLDs

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

The following part numbers should be used when **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.

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

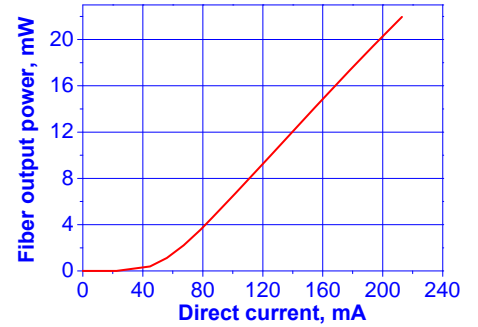
All specifications are subject to change without notice

Applications:

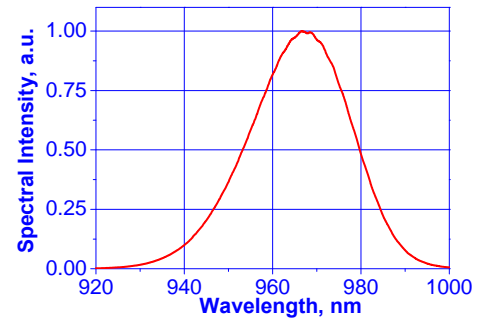
- optical sensing
- optical coherence tomography
- optical measurements

PERFORMANCE EXAMPLES

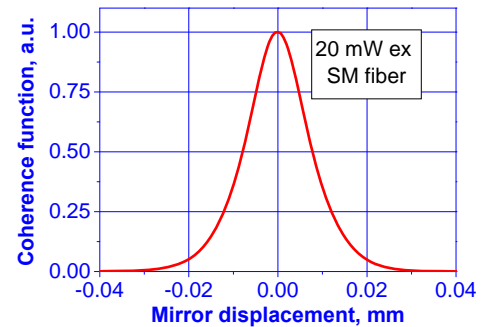
SLD-481-HP2-SM Light-current curve



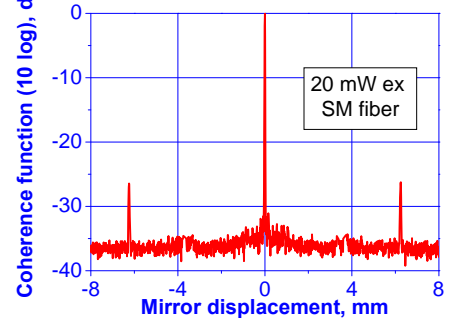
Spectrum example - 20 mW ex SM fiber



Short displacement



Extended displacement



Mirror displacement = Optical path difference / 2