

Features:

- 3 power categories: up to 25mW ex SM fiber SLDs with 50nm FWHM spectrum at 840 nm
- short coherence length
- negligible residual Fabry-Perot modulation depth

Packages:

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

Additional & customized:

- PD - monitors
- FC/APC terminated pigtailed
- PM pigtailed (polarized or depolarized output emission ex PM- fiber)

Specifications

(Nominal Emitter Stabilization Temperature +25 °C)

| Parameter | Category | Min | Typ | Max |
|---|----------|-----|-----|-----|
| Output power, mW, SM fiber pigtail, SLD-371-HP | HP1 | 5 | 7.5 | - |
| | HP2 | 10 | 15 | - |
| | HP3 | 20 | 25 | - |
| Free space output power, mW, in a cone N.A.=0.71, emitter @ +25 °C* | HP1 | 10 | 15 | - |
| | HP2 | 20 | 30 | - |
| | HP3 | 40 | 50 | - |
| Forward current**, mA | HP1, 2 | - | 150 | 250 |
| | HP3 | - | 275 | 350 |
| Forward voltage, V | All | - | - | 2.6 |
| Central wavelength, nm | All | 820 | 840 | 860 |
| Spectrum width, FWHM, nm | All | 45 | 50 | - |
| Residual spectral modulation depth, % | All | - | 2.0 | 5.0 |
| Secondary coherence subpeaks (Reflectivity), dB (10 log) | All | - | -25 | - |
| Spectral Flatness***, dB | All | - | - | 2.0 |
| Slow / fast polarization ratio (PM polarized modules), dB**** | All | - | 7.0 | - |
| Operation temperature range*****, °C | All | -55 | - | +80 |
| Cooler current, A | All | - | - | 1.2 |
| Cooler voltage, V | All | - | - | 3.5 |

* TOW packaged SLDs;

** current is specially adjusted to get highest output power with equal intensity of spectral lobes; different for different modules;

*** Spectral Flatness parameter describes spectral intensity dropout between spectral lobes;

**** LYOT depolarized versions are available upon request;

***** Butterfly packaged SLDs

SLD modules with similar outgoing parameters are available at median wavelength 800 nm and 880 nm.

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

SLD-37(a)-(b)-(c)-(d)-(e)

Where:

- a = 0 (free space) or 1 (fiber pigtailed)
- b = power category HP1, HP2 or HP3
- c = package type
- d = SM or PM (fiber coupled modules)
- e = PD (if PD monitor is required)

Example: SLD-371-HP1-DIL-SM-PD

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

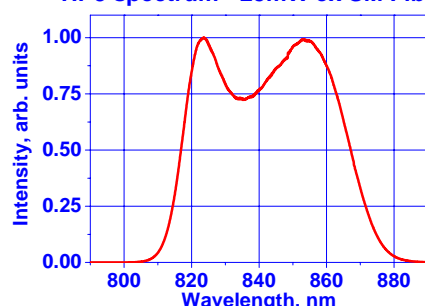
All specifications are subject to change without notice.

Applications:

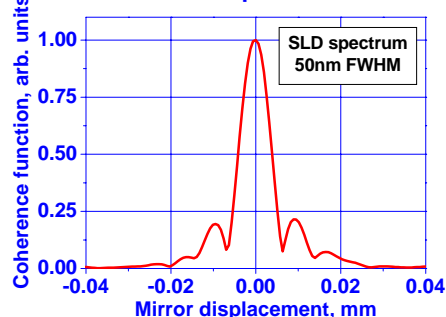
- fiberoptic sensors
- Bragg grating sensors
- optical coherence tomography
- optical measurements

PERFORMANCE EXAMPLES

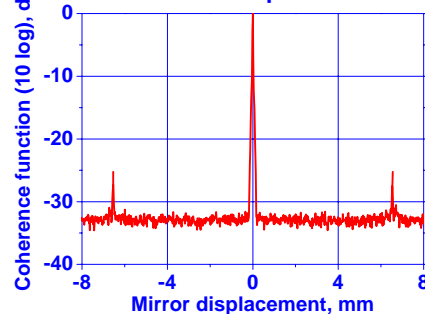
HP3 spectrum - 25mW ex SM Fiber



Short displacement



Extended displacement



Mirror displacement = Optical path difference / 2