Superlum Diodes, Ltd.

SLD-37-MP: very-wide-spectrum SLD modules for 800-870 nm spectral band

Features:

- very wide optical spectrum
- short coherence length
- negligible residual Fabry-Perot modulation depth

Packages:

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

Additional & customized:

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

Applications:

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

Specifications
(Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Min	Typ	Max
Output power, mW, SM fiber pigtail, emitter @ +25°C	1.0	1.25	-
Free space output power, mW, in a cone N.A.=0.71, emitter @ +25 °C*	4.0	6.0	-
Forward current**, mA	-	150	220
Forward voltage, V	-	2	2.6
Central wavelength, nm	820	835	850
Spectrum width, FWHM, nm	45	50	-
Residual spectral modulation depth, %	-	1.0	2.0
Secondary coherence subpeaks (Reflectivity), dB (10 log)	-	-25	-20
Spectral Flatness***, dB	-	-	1.5
Slow / fast polarization ratio (PM polarized modules), dB****	-	7.0	-
Operation temperature range, °C*****	-55	-	+80
Cooler current, A	-	-	1.2
Cooler voltage, V	-	-	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.

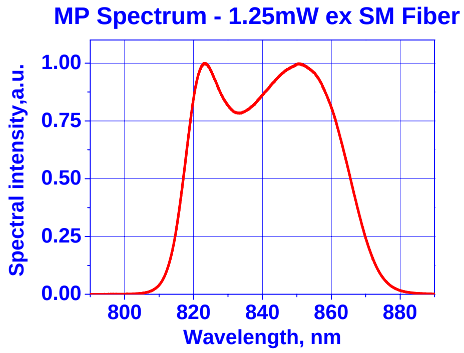
Following marking should be used for **ORDERING**:

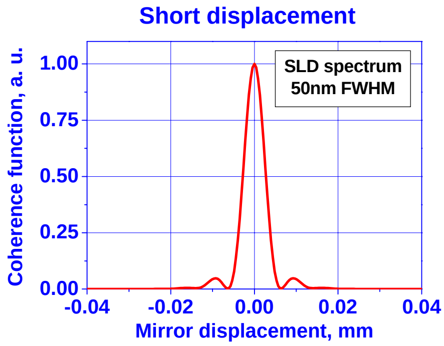
SLD-37(a)-MP-(c)-(d)-(e)
Where:
a = 0 (free space) or 1 (fiber pigtailed)
c = package type
d = SM or PM (fiber coupled modules)
e = PD (if PD monitor is required)

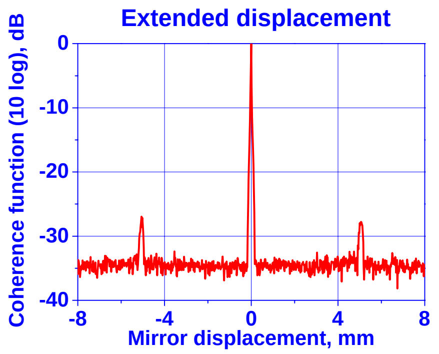
Example: SLD-371-MP-DIL-SM-PD

All specifications are subject to change without notice.

PERFORMANCE EXAMPLES







Mirror displacement = Optical path difference / 2

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