SUPERLUM

SLD-35-MP: extremely wide-spectrum SLD modules for 790-890 nm spectral band

Features:

- very wide optical spectrum
- short coherence length
- negligible residual Fabry-Perot modulation depth
- SM or PM pigtails (polarized or pseudo-depolarized output emission ex PM fiber)
- PD monitors
- FC/APC terminated pigtails

Applications:

- ultra-high resolution OCT
- Bragg grating sensors
- fiber sensors
- optical measurements

Packages:

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

Specifications (Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Min	Typ	Max
Output power, SM fiber pigtail, SLD-351, mW	1.0	1.25	-
Free space output power, in a cone N.A.=0.71, SLD-350*, mW	4.0	6.0	-
Forward current†, mA	-	150	220
Forward voltage, V	-	2	2.6
Central wavelength, nm	820	845	870
Spectrum width, FWHM, nm	57	62	-
Residual spectral modulation depth, %	-	1.0	2.0
Secondary coherence subpeaks (Reflectivity), dB (10 log)	-	−25	−20
Spectral flatness‡, dB	-	2.0	2.5
Slow / fast polarization ratio (PM fiber-coupled modules), dB**	-	7.0	-
Operating temperature††, °C	−55	-	+80
Cooler current, A	-	-	1.2
Cooler voltage, V	-	-	3.5

* TOW packaged SLDs;

† Current is specially adjusted to get the highest output power with equal intensity of spectral lobes; different for different modules;

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

** Pseudo-depolarized versions (light is launched into the fiber at 45 degrees to the birefringent axes) are available upon request;

†† Butterfly packaged SLDs.

Very broad spectrum SLDs (80 nm FWHM) are available upon request!

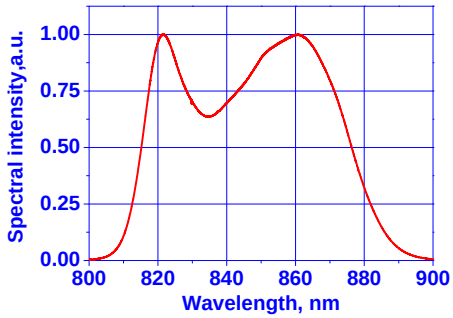
The following part numbers should be used when **ordering**:

SLD-35(a)-(b)-(c)-(d)-(e),
where: (a) – 0 (free space) or 1 (fiber pigtailed),
(b) – power category (HP), (c) – package type,
(d) – type of fiber, SM or PM (for fiber coupled modules),
(e) – PD (if a PD monitor is required).

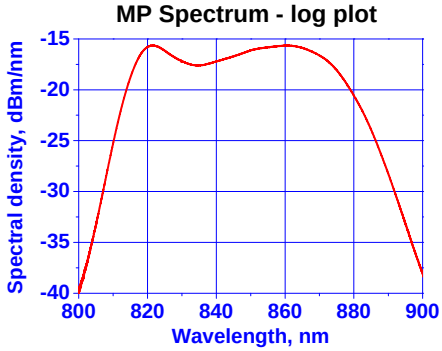
Example: SLD-351-MP-DBUT-SM-PD.

PERFORMANCE EXAMPLES

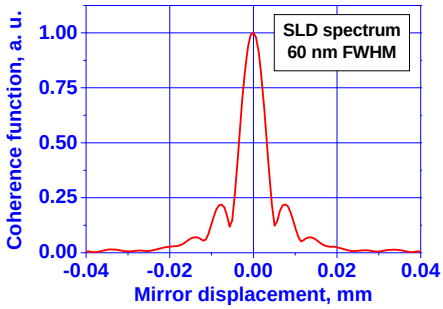
Spectrum - linear plot



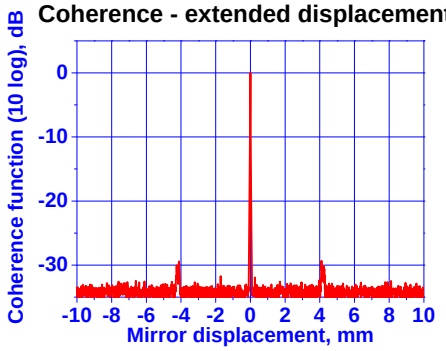
MP Spectrum - log plot



Coherence - Short displacement



Coherence - extended displacement



Mirror displacement = Optical path difference / 2

All specifications are subject to change without notice.

A lot of customized solutions are available — contact us with your detailed requirements!

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