SUPERLUM

SLD-34-MP: Superluminescent diodes at 840 - 860 nm with broad bell-shaped spectrum

Features:

- very wide bell-shaped optical spectrum
- no sidelobes in the coherence function
- negligible residual Fabry-Perot modulation depth
- internal PD monitor
- FC/APC terminated pigtails

Packages:

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

Additional and customized:

- PM pigtails (slow axis alignment; 45 degree orientation upon request)

Specifications (nominal emitter stabilization temperature +25°C)

Parameter		Category	Min	Typ.	Max
Output power, SM fiber pigtail, SLD-341, mW		MP1	0.8	1.0	-
		MP2	1.5	2.0	-
Output power, Glass window, SLD-340, mW		MP1	2.0	2.5	-
		MP2	3.0	4.0	-
Forward current, mA		MP1	-	170	200
		MP2	-	180	220
Forward voltage, V		All	-	-	2.8
Central wavelength, nm	SLD-34 at 840	All	830	840	850
	SLD-34 at 860	All	850	860	870
Spectrum width, FWHM, nm		MP1	55	60	-
		MP2	45	50	-
Residual spectral modulation depth, %		MP1	-	-	1.0
		MP2	-	-	2.0
Secondary coherence subpeaks (Reflectivity), dB (10 log)		All	-	-25	-
Slow / fast polarization ratio (PM modules)*, dB		All	-	7.0	-
Operating temperature, °C		All	-55	-	+80
Cooler current, A		All	-	-	1.2
Cooler voltage, V		All	-	-	3.5

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

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

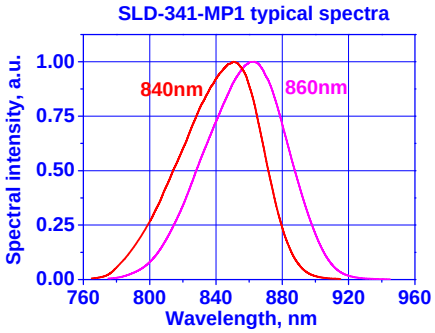
SLD-34(a)-(b)-(c)-(d)-(e)-(f),
where:
(a) – 0 (free space) or 1 (fiber pigtailed),
(b) – power category (MP1, MP2), (c) – package type,
(d) – SM (isotropic) or PM (polarization maintaining) fiber (pigtailed versions only),
(e) – PD (if PD monitor is required), (f) – central wavelength.

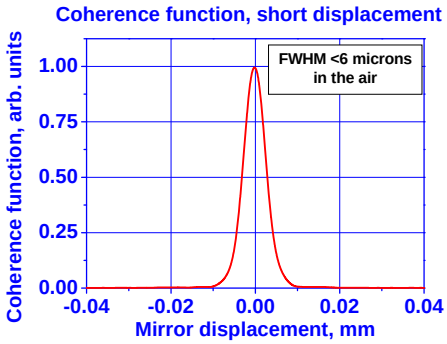
Example: SLD-341-MP1-DBUT-SM-PD-840.

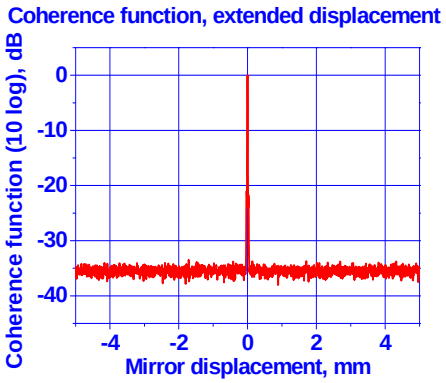
Applications:

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

PERFORMANCE EXAMPLES







Mirror displacement = Optical path difference /2

All specifications are subject to change without notice.

Superlum, Unit 1F, Eastlink Business Park, Carrigtwohill, Co. Cork, Ireland.
Phone: +353 21 4533666, Fax: +353 21 4533026, Web site: www.superlumdiodes.com, E-mail: sales@superlum.ie.