

Features:

- fiber coupled and free space SLDs at 770–890 nm
- Bell-shaped spectrum with negligible residual Fabry-Perot modulation depth
- maximum parasitic secondary coherence subpeaks of -20 dB (10log) for standard SLDs, and of -30 dB (spectral ripple < 0.5%/0.02 dB) for special series

Applications:

- fiberoptic gyros
- optical coherence tomography
- Bragg grating and other fiberoptic sensors
- optical metrology
- others

Packages:

- fiber coupled — DIL, DBUT(butterfly)
- free space — TOW 1, 2

Standard specifications (nominal emitter stabilization temperature is + 25 °C)

Parameter	Min	Typ.	Max
Output power ex SM fiber*, mW (emitter @ +25 °C) – SLD-381-MP	1.5		3
Output power ex glass window, mW (emitter @ +25 °C) – SLD-380-MP	6.0		12.0
Forward current, mA			160
Forward voltage, V			2.7
Peak wavelength**, nm	770	830	890
Spectrum width, nm	15	20	
Residual spectral modulation depth, %***		1.0	2.0
Secondary coherence subpeaks*** (10 log), dB		-25	-20
PD monitor current, µA	100		
Operating temperature****, °C	-55		+85
Storage temperature, °C	-55		+85
Cooler current, A			1.2
Cooler voltage, V			3.5

- * Maximum output power is guaranteed at a forward current of 160 mA or less.
- ** Available peak wavelengths are: 780, 795, 810, 830, 840, 850, 860, 870, 880 nm with a tolerance of ±10 nm.
- *** Residual spectral modulation depth and secondary coherence subpeaks are specified at an output power of 1.5 mW ex fiber.
- **** Case temperature (depends on package type). The specification shown is the case temperature for butterfly-packaged modules.

Additional and customized:

- wider spectrum, higher power, lower spectral ripple for meeting customer requirements—see the next page for performance examples;
- FC/APC terminated pigtailed;
- PM fiber coupled, polarized or pseudo-depolarized (light is launched into the fiber with its polarization oriented at 45 degrees to the birefringent axes) versions.

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

SLD-38(a)-MP-(c)-(d)-(e)-XXX,

where: a – 0 (free space) or 1 (fiber pigtailed),

c – package type – DIL14, DBUT or TOW, d – type of fiber – SM (isotropic) or

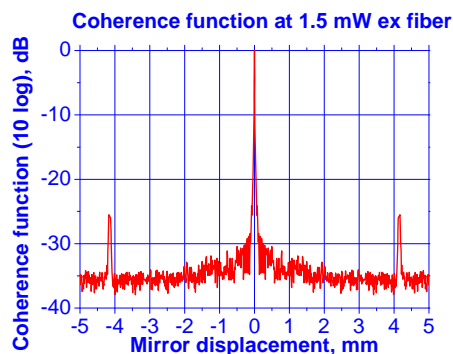
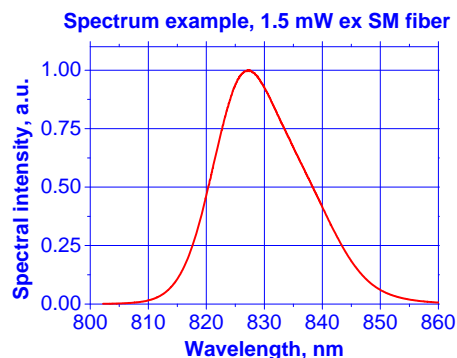
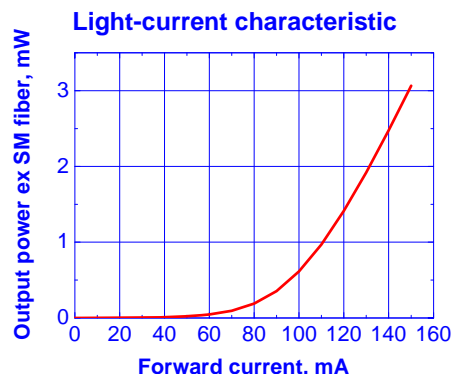
PM (polarization maintaining) – pigtailed versions,

e – PD (if PD monitor is required), XXX – wavelength (in nanometers).

Examples: SLD-381-MP-DIL-SM-PD-830 or SLD-380-MP-TOW2-PD-780.

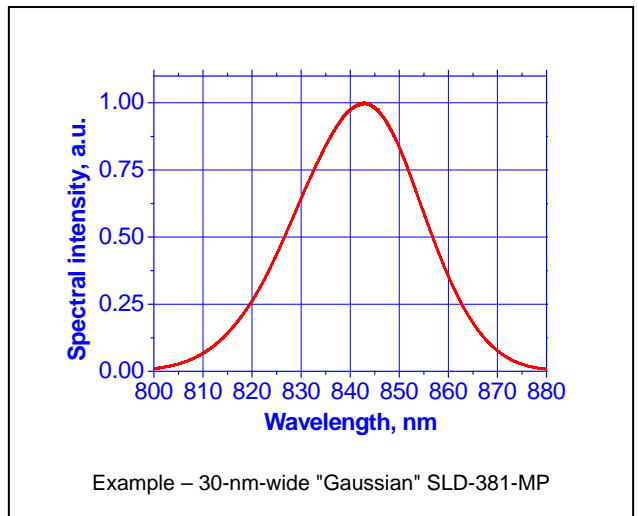
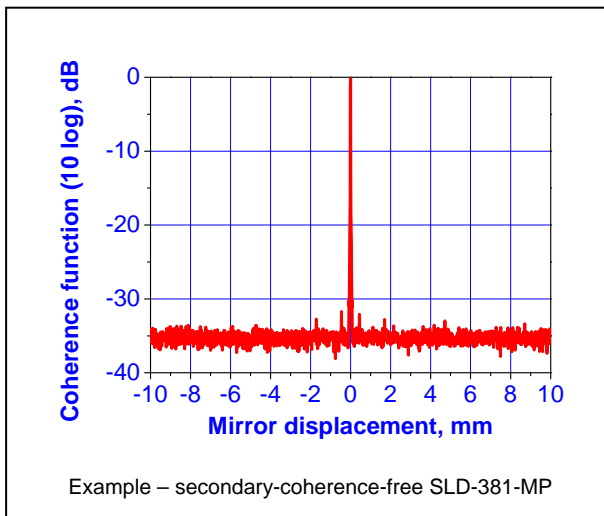
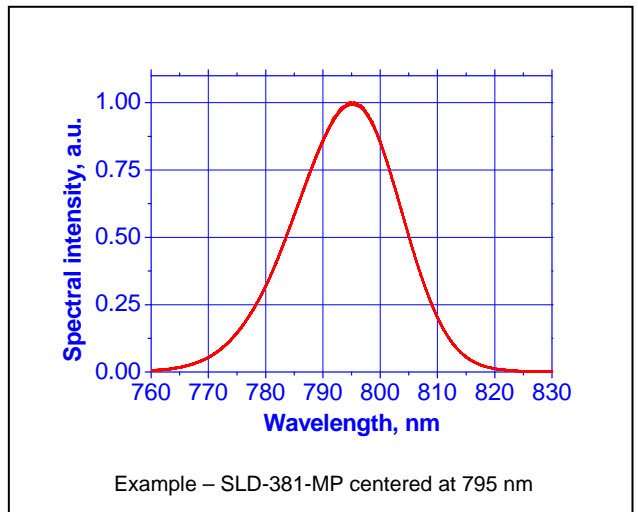
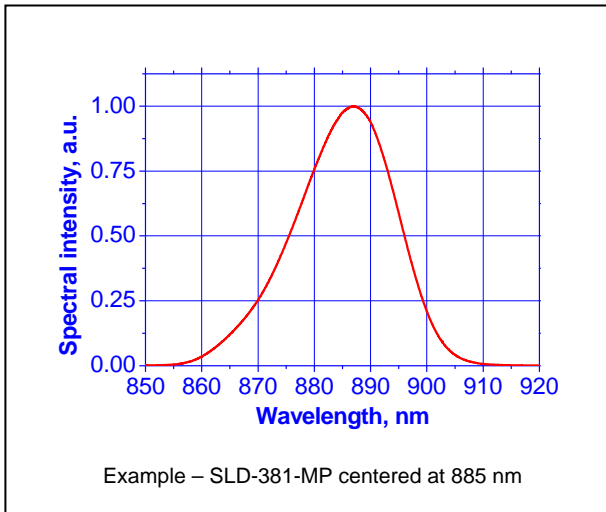
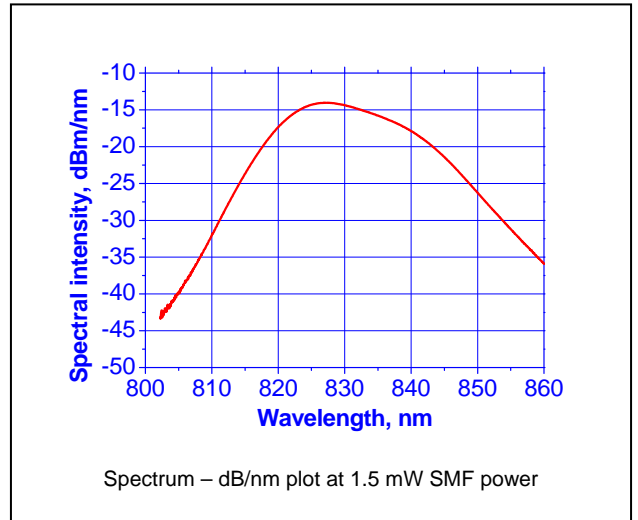
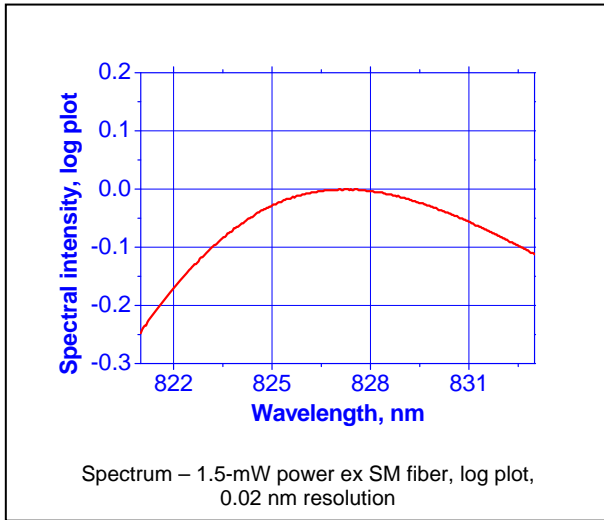
Attention: center wavelength is guaranteed with a tolerance of maximum ±10 nm. If a closer tolerance is required, contact Superlum before placing the order. If the center wavelength is not explicitly specified in the order, an SLD centered at any wavelength within the range of 830±20 nm may be shipped.

TYPICAL PERFORMANCE EXAMPLES



See the next page for more examples →

MORE PERFORMANCE EXAMPLES



All specifications are subject to change without notice.