

**Features:**

- SM- or PM-fiber coupled SLDs at 770–870 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, Butterfly

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

Parameter	Min	Typ.	Max
Output power ex SM fiber*, mW (emitter @ +25 °C)	1.5		3
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 range****, °C	-55		+85
Storage temperature range, °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.
- \*\* 830-nm wavelength is not guaranteed if it is not mentioned in the order. See part numbers below.
- \*\*\* 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 style). 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 at 45 degrees to the birefringent axes) versions.

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

SLD-381-MP-(c)-(d)-PD-XXX,  
where:

- c – package type, DIL14, DBUT(butterfly) or SBUT (semi-butterfly),
- d – type of fiber, SM (isotropic) or PM (polarization maintaining),
- XXX – wavelength (in nanometers).

Example: SLD-381-MP-DIL-SM-PD-830.

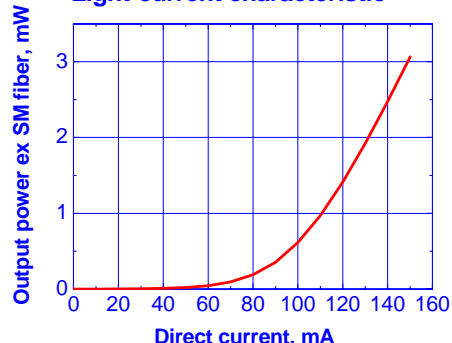
**Attention:** center wavelength is guaranteed with a tolerance of maximum ±10 nm. If a closer tolerance is required, contact Superlum before placing the order. If the center wavelength is not explicitly specified in the order, an SLD centered at any wavelength within the range of 830±20 nm may be shipped.

**See also our uncooled SM-fiber coupled modules—  
SLD-381-minibut-SM.**

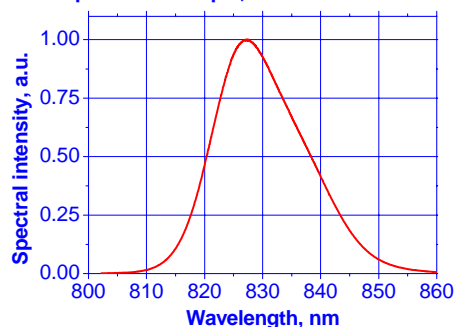
without notice.

**TYPICAL PERFORMANCE EXAMPLES**

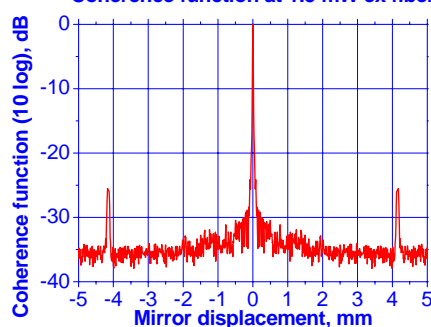
**Light-current characteristic**



**Spectrum example, 1.5 mW ex SM fiber**



**Coherence function at 1.5 mW ex fiber**



**See the next page for more examples.**

All specifications are subject to change

MORE PERFORMANCE EXAMPLES

