Superlum Diodes, Ltd. — SLD-47-MP: medium power wide-spectrum SLD at 930 nm

Features:

- very wide, 70 nm FWHM optical spectrum
- short coherence length
- negligible residual Fabry-Perot modulation depth

Applications:

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

Packages:

- fiber coupled: DIL, Butterfly
- free space: TOW 1, 2

Additional & customized:

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

Specifications
(Nominal Emitter Stabilization Temperature +25 °C

Parameter	Min	Typ	Max
Output power, mW, SM fiber pigtail, emitter @ +25 °C	1.0	1.5	-
Free space output power, mW, in a cone N.A.=0.71, emitter @ +25 °C*	3.5	5.0	-
Forward current**, mA	-	150	250
Forward voltage, V	-	2.0	2.5
Central wavelength, nm	910	935	950
Spectrum width, FWHM, nm	50	70	-
Residual spectral modulation depth, %	-	-	2.0
Secondary coherence subpeaks, dB (10 log)	-	-25	-20
Spectral Flatness***, dB	-	1.0	2.0
Slow / fast polarization ratio (PM “polarized” modules), dB****	5	10	-
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

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

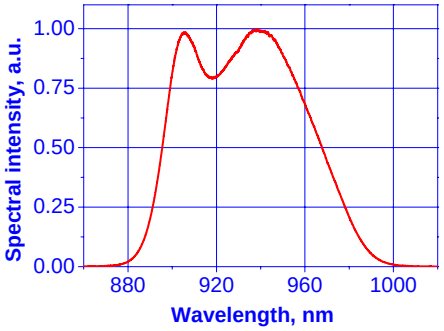
SLD-47(a)-MP-(c)-(d)-(e)
Where:
a = 0 (free space) or 1 (fiber pigtailed)
c = package type
d = SM or PM (fiber coupled modules)
e = PD (if PD monitor is required)

Example: SLD-471-MP-DIL-SM-PD

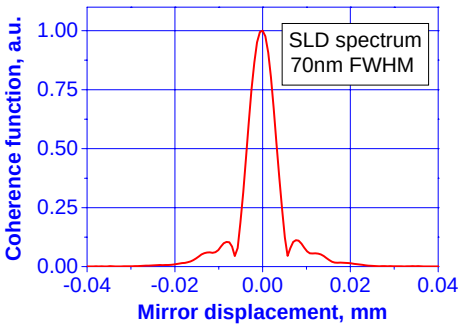
All specifications are subject to change without notice

PERFORMANCE EXAMPLES

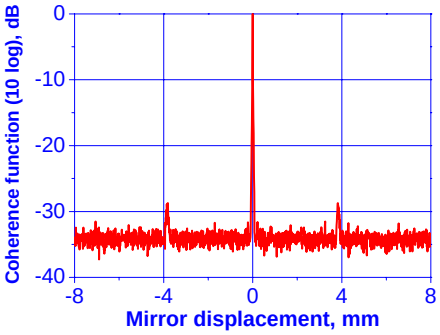
MP spectrum - 1.5mW ex SM Fiber



Short displacement



Extended displacement



Mirror displacement = Optical path difference / 2

Moscow, Russia, Phone: +7 495 720 5448, Fax: +7 495 720 5465, E-mail: info@superlumdiodes.com, Web site: www.superlumdiodes.com