Superlum Diodes, Ltd.

SLD-53-HP: Very high power SLD modules at 1050 nm

Features:

- very high output power, up to 30 mW ex SM fiber
- up to 75 mW free space output on request
- flat spectrum with small residual Fabry-Perot modulation depth

Packages:

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

Additional & customized:

- PD - monitors
- FC/APC terminated pigtails
- SM or PM pigtails (polarized or depolarized output emission ex PM fiber)

Applications

- optical sensing
- optical coherence tomography
- optical measurements

Specifications
(Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Category	Min	Typ	Max
Output power, emitter @ +25 °C SLD-531-HP SM fiber pigtailed	HP1	-	-	10.0
	HP2	-	-	20.0
	HP3*	-	-	30.0
Output power, mW, emitter @ +25 °C Glass Window SLD-530-HP**	HP1	-	-	20.0
	HP2	-	-	40.0
	HP3*	-	-	60.0
Forward current, mA	HP1	-	200	350
	HP2	-	250	400
	HP3*	-	350	400
Forward voltage, V	All	-	-	2.2
Peak wavelength, nm	All	1040	-	1060
Spectrum width, FWHM, nm	HP1	25	30	60
	HP2	30	35	60
	HP3	30	35	40
Residual spectral modulation depth, %	All	-	2.0	5.0
Secondary coherence subpeaks (Reflectivity), dB (10 log)	All	-	25	-
Slow / fast polarization ratio (PM modules), dB***	All	5.0	-	-
Operation temperature range (case), °C****	All	-55	-	+75
Cooler current , A	All	-	-	1.2
Cooler voltage, V	All	-	-	3.5

* SLD- modules of HP3 power category are available in engineering quantity;
** TOW packaged SLDs;
*** LYOT depolarized versions are available upon request
**** Butterfly packaged SLDs

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

SLD-53(a)-(b)-(c)-(d)-(e)
Where:
a = 0 (free space) or 1 (fiber pigtailed)
b = power category (HP1...HP3)
c = package type
d = SM (isotropic) or PM (polarization maintain) fiber (pigtailed versions only)
e = PD (if PD monitor is required)

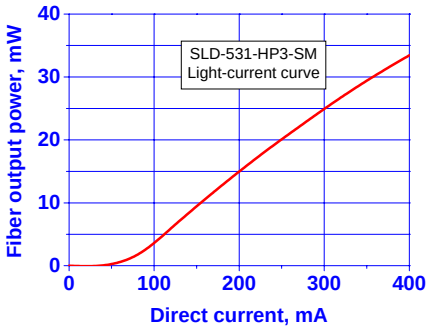
Example : SLD-531-HP1-DBUT-SM-PD

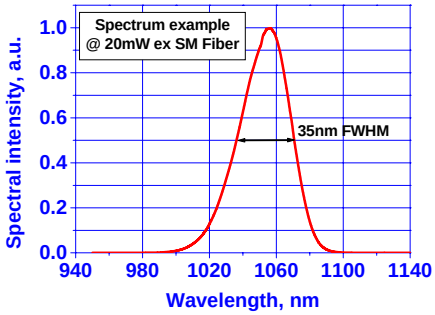
10^{-3} maximum feedback is allowed to run HP SLDs safely at full power.

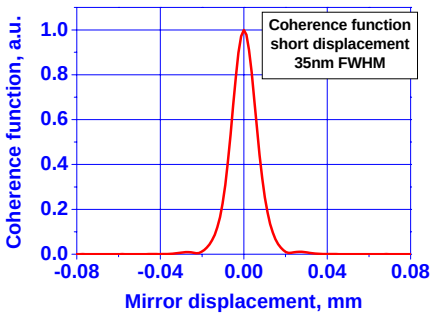
All specifications are subject to change without notice.

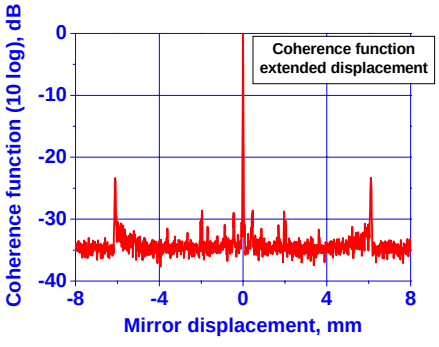
A lot of customized solutions are available – contact us with your detailed requirements!

PERFORMANCE EXAMPLES









Mirror displacement = Optical path difference / 2

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