SUPERLUM — SLD-260-MP: Medium power free-space SLD at 670 nm.

Features:

- visible 670 nm band SLD modules
- LD-like spatial brightness
- LED-like flat spectrum with negligible residual Fabry-Perot modulation depth
- maximum parasitic secondary coherence subpeaks intensity below -20 dB (10 log), maximum below -30 dB upon request

Applications:

- atomic force microscopy
- optical sensors
- optical coherence tomography
- optical measurements
- others

TO9 Package*

* Free-space SLD modules in “cooled” TOW1, 2 packages with internal TEC and thermistor for SLD temperature stabilization are available upon request.

Specifications (Nominal Emitter Stabilization Temperature +25 °C)

Parameter	Cat.	Min	Typ.	Max
Free-space output power, in a cone N.A. = 0.71, mW	MP1	1.5	-	3.0
	MP2	3.0	-	5.0
Forward current*, mA	All	-	-	160
Forward voltage, V	All	-	-	3.0
Peak wavelength**, nm	All	660	670	680
Spectrum width, nm	All	6.0	7.5	-
Residual spectral modulation depth***, %	All	-	1.0	2.0
Secondary coherence subpeaks*** (10 log), dB	All	-	-25	-20
Polarization ratio, dB	All	-	20	-
PD monitor photocurrent, μA	MP1	50	-	-
	MP2	100	-	-

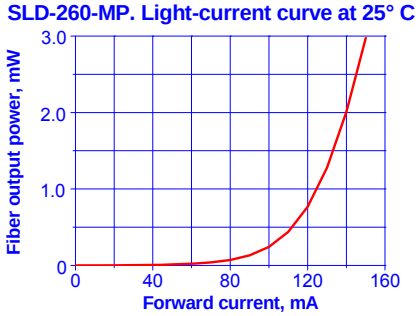
* It is not allowed to exceed maximum output power or maximum drive current, whatever happens first.

** Center wavelength 670 nm is not guaranteed. Contact Superlum representative if you require a tighter tolerance of center wavelength.

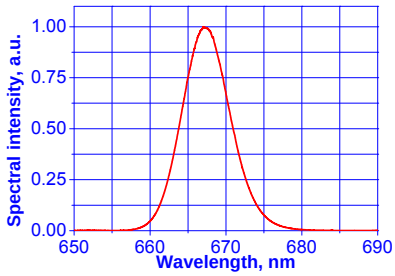
*** Rated at minimum power, not guaranteed at maximum power of a particular power category.

PERFORMANCE EXAMPLES

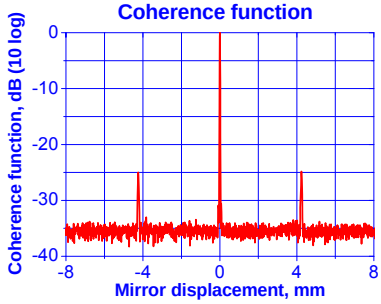
SLD-260-MP. Light-current curve at 25° C



Spectrum example

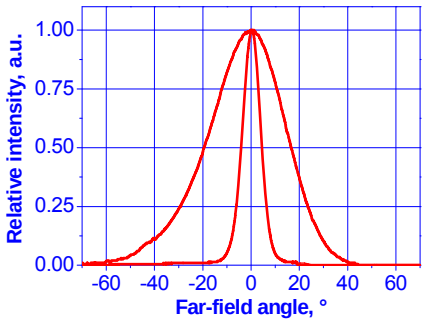


Coherence function

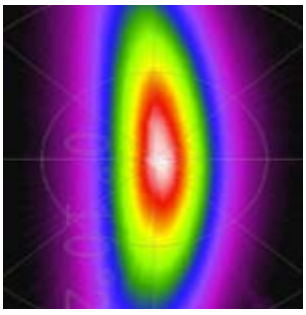


Mirror displacement = Optical path difference /2

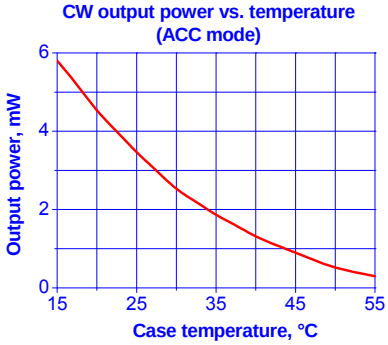
Far field distribution



Output Beam cross section



CW output power vs. temperature (ACC mode)



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

SLD-260-MP(a)-(b)-PD,
where: (a) – power category (MP1 or MP2), (b) – package type.

Example: SLD-260-MP2-TO9-PD.

All specifications are subject to change without notice.

JAPAN DEVICE 日本デバイス株式会社 E-mail sales@j-device.com
www.j-device.com Tel 03-6262-3424 Fax 03-6800-5883