

Features:

- Spatial brightness comparable to that of laser diodes
- Flat spectrum (comparable to that of LEDs) with negligible residual Fabry-Perot modulation depth
- Spectral ripple of 2% or less
- maximum parasitic secondary coherence subpeaks of -20 dB (10log)
- higher power versions (up to 50 mW and more at +25 °C) are available upon request

Applications:

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

TO9 Package*



* Free-space SLD modules in temperature stabilized packages (like TOW1,2 or TO3 with internal TEC and thermistor for SLD temperature stabilization) are available upon request.

Optical and Electrical Characteristics (at +25 °C)

Parameter	Min	Typ.	Max
Output power, mW, in a cone N.A.=0.71 (emitter @ +25 °C)	10		20
Forward current*, mA			160
Forward voltage, V			2,6
Peak wavelength**, nm	830	840	850
Wavelength shift around +25 °C, $d\lambda/dT$, nm/°C		0.3	
Spectrum width, nm	15	17–18	
Residual spectral modulation depth***, %		1.0	2.0
Secondary coherence subpeaks*** (10 log), dB		-25	-20
Polarization ratio, dB		5-10	
PD monitor photocurrent, μ A	100		
dP/dT around +25 C, %/°C, at a constant forward current****		-2	
Storage temperature, °C	-55		+85

* Maximum output power is guaranteed at a forward current of 160 mA or less.

** SLDs at other center wavelengths, for example, 790±10 nm, are available upon request

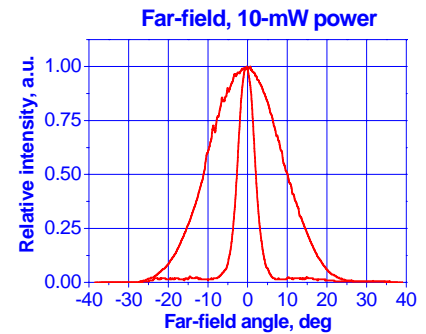
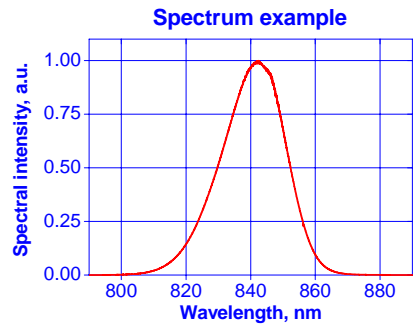
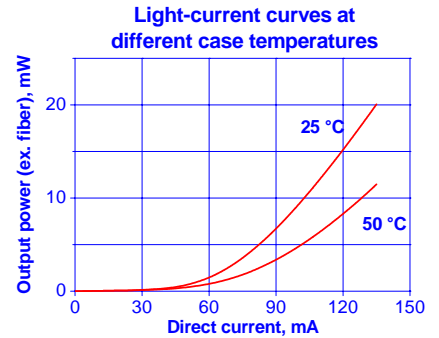
*** Measured at output power of 10 mW

**** In percent of the value of output power at +25 °C. Typical value for output power is 5–20 mW at +25 °C. Note: operation at high temperature accelerates aging and reduces lifetime

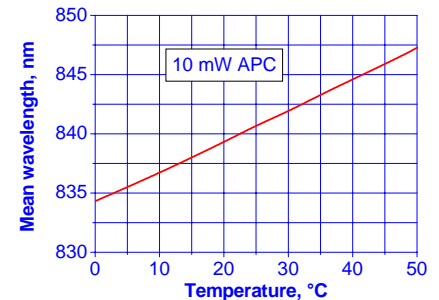
The following part numbers should be used for **ordering**:

SLD-380-MP-TO9-PD.

PERFORMANCE EXAMPLES



Mean wavelength vs. case temperature



All specifications are subject to change without notice.