

Features:

- CW output power of up to 100 mW
- Spatial brightness comparable to that of high-power single mode laser diodes
- Wide spectrum (comparable to that of LEDs) with very small residual Fabry-Perot modulation depth

Applications:

- optical illumination
- optical sensors
- optical measurements
- others

TO9 Package



Free-space SLD modules in temperature stabilized packages with internal TEC and thermistor for SLD temperature stabilization are available upon request.

Specifications (at +25 °C):

Parameter	Min	Typ.	Max
Output power (in a cone N.A.=0.71), mW			100
Forward current, mA			450
Forward voltage, V			3.0
Peak wavelength at +25 °C, nm	830	840	850
Wavelength shift with temperature (around +25 °C), dλ/dT, nm/°C		0.25	
Spectrum width*, nm	20	25-30	
Residual spectral modulation depth*, %		3.0	5.0
Secondary coherence subpeaks* (10 log), dB		-20	
Polarization ratio, dB		5-10	
PD monitor photocurrent*, μA	300		
Output power variation with temperature (around +25 °C), dP/dT, at a constant forward current*, mW/°C		-0.7	
Operating temperature**, °C	-20		+50
Storage temperature, °C	-55		+85

* At an output power of 100 mW.

** At +50 °C, the maximum output power is limited to 50 mW.

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

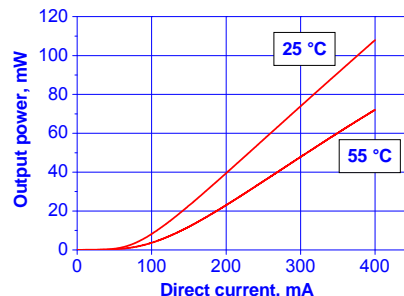
SLD-340-UHP-TO9-PD-840.

A maximum optical feedback of 10^{-3} is allowed to run HP series SLDs safely at full power

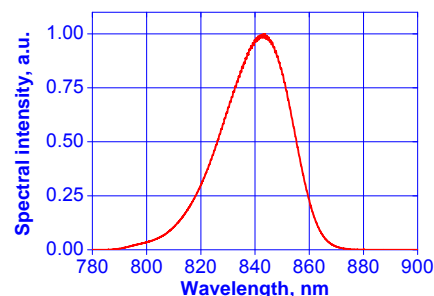
All specifications are subject to change without notice.

PERFORMANCE EXAMPLES

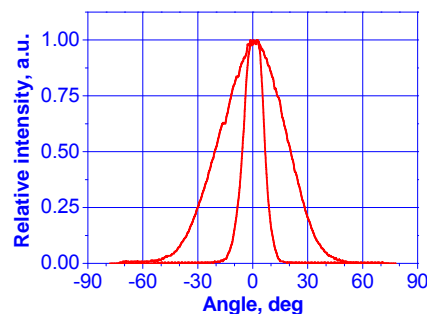
Light-current curves at different case temperatures



Spectrum example



Far field



Mean wavelength vs. case temperature

