

Features:

- CW output power of up to 80 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			80
Forward current, mA			450
Forward voltage, V			3.0
Peak wavelength at +25 °C, nm	1030	1045	1050
Wavelength shift around +25 °C, dλ/dT, nm/°C		0.2	
Spectrum width*, nm	30	35-45	
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		-0.6	
Operating temperature**, °C	-20		+50
Storage temperature, °C	-55		+85

* At an output power of 80 mW

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

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

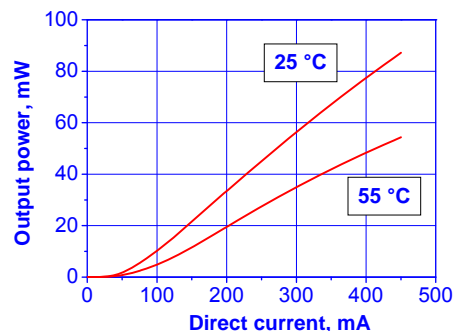
SLD-530-UHP-TO9-PD-1040.

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

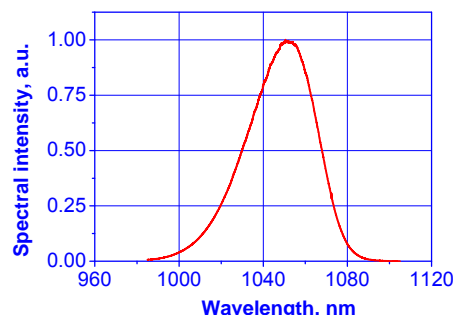
All specifications are subject to change without notice.

PERFORMANCE EXAMPLES

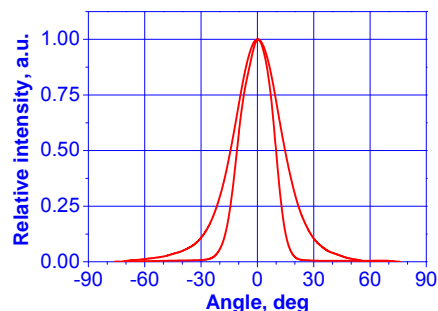
Light-current curves at different case temperatures



Spectrum example



Far field



Mean wavelength vs. case temperature

