

### Features:

- CW output power of up to 90 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, mW, in a cone N.A.=0.71			90
Forward current, mA			450
Forward voltage, V			3,0
Peak wavelength at +25 °C, nm	950	960	970
Wavelength shift around +25 °C, $d\lambda/dT$ , nm/°C		0.2	
Spectrum width*, nm	40	45-50	
Residual spectral modulation depth*, %		3.0	6.0
Secondary coherence subpeaks* (10 log), dB		-20	
Polarization ratio, dB		16	
PD monitor photocurrent*, $\mu\text{A}$	300		
Power shift around +25 °C, $dP/dT$ , mW/°C, at a constant forward current*		-0.7	
Operating temperature**, °C	-20		+50
Storage temperature, °C	-55		+85

\* At an output power of 90 mW

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

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

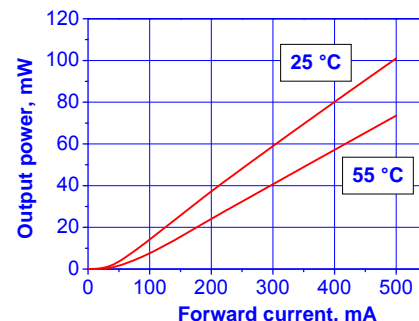
SLD-480-UHP-TO9-PD-960.

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

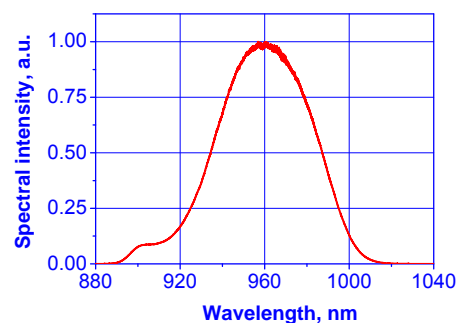
All specifications are subject to change without notice.

### PERFORMANCE EXAMPLES

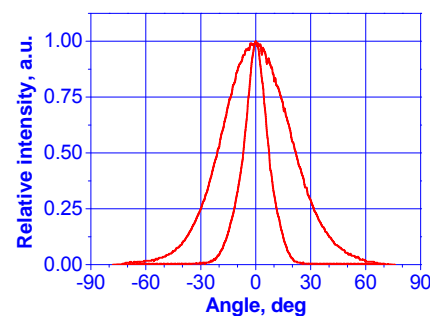
#### Light-current curves at different case temperatures



#### Spectrum example



#### Far field



#### Mean wavelength vs. case temperature

