

**Features:**

- CW output power of up to 30 mW
- LD-like spatial brightness, single transverse mode output
- LED-like bell-shaped spectrum with a very small ripples

**Applications:**

- Atomic force microscopy
- Optical coherence tomography
- Optical sensors
- Optical measurements
- Low speckle illumination
- Others

**TO-56 Package**



**Specifications (at +25 °C case):**

Parameter	Min	Typ.	Max
Output power, P, mW	–	–	30
Forward current, mA	–	–	210
Forward voltage, V	–	–	2.5
Central wavelength*, nm	840	850	860
Spectrum width*, nm	15	20	–
Residual spectral modulation depth*, % (Resolution 0.02 nm)	–	1.0	5.0
Wavelength shift with temperature P>5mW, dλ/dT, nm/°C, to λ at +25 °C	–	0.25	–
Secondary coherence subpeaks*, (10 log), dB	–	-25 <sup>†</sup>	–
Polarization ratio*, dB	–	8	–
Far field divergence in the p-n junction plane*, degrees	–	10	–
Far field divergence in the plane normal to p-n junction*, degrees	–	40	–
PD monitor photocurrent*, μA	50	–	–
Operating temperature <sup>‡</sup> , °C	-20	–	+55
Storage temperature, °C	-55	–	+85

\* At an output power of 30 mW and a case temperature of +25 °C.

<sup>†</sup> Guaranteed secondary subpeaks below -20 dB upon request.

<sup>‡</sup> At +55 °C, maximum output power should not exceed 15 mW.

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

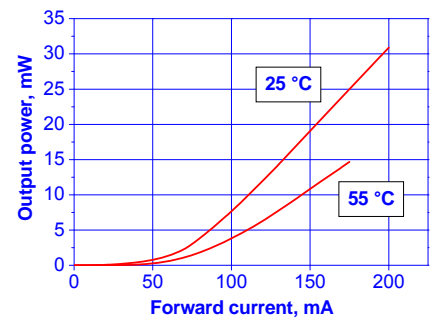
SLD-340-HP-TO56-PD-850

All specifications are subject to change without notice.

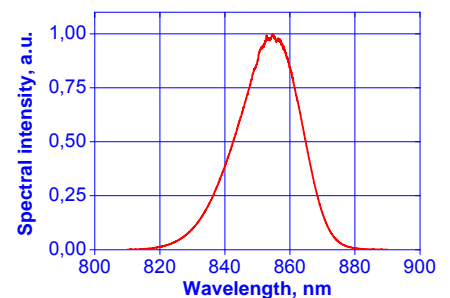
Rev.01.ST340TO56HP850.300817

**PERFORMANCE EXAMPLES**

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



**Spectrum example (30 mW)**



**Far field (30 mW)**

