

Superluminescent Diodes are semiconductor emitters combining the high brightness of laser diodes with a broad spectrum of LEDs. They are light sources of choice for numerous applications based on low coherence measurements, spectroscopy, low speckle illumination, and others.

Superlum offers a wide range of SLD modules and SLD-based light sources. Please also check our SLD controllers and light source modules to ensure safe and stable SLD operation in your system.

**Specifications (Nominal Emitter Stabilization Temperature +25 °C)**

Parameter	MIN	TYP	MAX
<b>S675.7.20M</b>			
Output power, $P_{op}$ , ex MM fiber, mW	–	–	20.0
Forward current at $P_{op}$ , mA	–	200	250
Central wavelength at $P_{op}$ , nm	665	675	685
Spectrum width at $P_{op}$ , FWHM, nm	6.0	7.0	–
PD monitor current <sup>†</sup> at $P_{op}$ , mA	0.5	–	–
<b>S785.15.50M</b>			
Output power, $P_{op}$ , ex MM fiber, mW	–	–	50.0
Forward current at $P_{op}$ , mA	–	300	400
Central wavelength at $P_{op}$ , nm	775	785	795
Spectrum width at $P_{op}$ , FWHM, nm	12.0	15.0	–
PD monitor current <sup>†</sup> at $P_{op}$ , mA	0.5	–	–

<sup>†</sup>- at 5 V reverse bias



**Applications**

High brightness optical illumination with reduced speckles

**Other parameters – all models**

Parameter	MIN	TYP	MAX
SLD forward voltage at $P_{op}$ , V, S675.20.7M	–	–	2.8
SLD forward voltage at $P_{op}$ , V, S785.50.15M	–	–	2.5
PD monitor bias voltage, V	–	–	5.0
Operating temperature at $P_{op}$ , °C	-20	–	+65
Storage temperature at $P_{op}$ , °C	-40	–	+85
Cooler current, A	–	–	2.5
Cooler current, V	–	–	3.2
Thermistor BETA, K	–	3892	–
Thermistor Resistance at 25 °C, kΩ	–	10	–

**Typical L-I curves**

