SUPERLUM

SLD-261-HP-670: High power fiber-coupled SLD at 670 nm

Features:
- High power 670 nm band SM fiber-coupled SLD modules
- Bell-shaped spectrum
- FC/APC terminated fiber pigtails, other connectors upon request

Applications:
- Optical sensors
- Optical coherence tomography
- Optical measurements
- Atomic force microscopy
- Others

Packages:
- fiber-coupled –Butterfly; DIL and other packages are available upon request

Specifications (Nominal Emitter Stabilization Temperature +25 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Category</th>
<th>Min</th>
<th>Typ.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output power, $P_{op}$, ex SM fiber, mW</td>
<td>HP1</td>
<td>4</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>HP2</td>
<td>8</td>
<td>–</td>
<td>10</td>
</tr>
<tr>
<td>Forward current at $P_{op}$, mA</td>
<td>All</td>
<td>–</td>
<td>150</td>
<td>220</td>
</tr>
<tr>
<td>Forward voltage at $P_{op}$, V</td>
<td>All</td>
<td>–</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Central wavelength* at $P_{op}$, nm</td>
<td>All</td>
<td>660</td>
<td>670</td>
<td>680</td>
</tr>
<tr>
<td>Spectrum width at $P_{op}$, FWHM, nm</td>
<td>All</td>
<td>6.0</td>
<td>7.5</td>
<td>–</td>
</tr>
<tr>
<td>Residual spectral modulation depth at $P_{op}$, %</td>
<td>All</td>
<td>–</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Secondary coherence subpeaks at $P_{op}$, dB (10 log)</td>
<td>All</td>
<td>–</td>
<td>&lt;−20</td>
<td>–</td>
</tr>
<tr>
<td>Slow/fast polarization ratio (PM modules) at $P_{op}$, dB</td>
<td>All</td>
<td>7.5</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Operating temperature† at $P_{op}$, °C</td>
<td>All</td>
<td>−55</td>
<td>–</td>
<td>+75</td>
</tr>
<tr>
<td>Storage temperature at $P_{op}$, °C</td>
<td>All</td>
<td>−55</td>
<td>–</td>
<td>+85</td>
</tr>
<tr>
<td>PD monitor photocurrent at $P_{op}$, µA</td>
<td>All</td>
<td>100</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cooler current, A</td>
<td>All</td>
<td>–</td>
<td>–</td>
<td>1.2</td>
</tr>
<tr>
<td>Cooler voltage, V</td>
<td>All</td>
<td>–</td>
<td>–</td>
<td>3.5</td>
</tr>
</tbody>
</table>

* A central wavelength of 830 nm is not guaranteed. Contact Superlum representative if you require a tighter tolerance of central wavelength.
† Butterfly packaged SLDs

The following part numbers should be used when ordering:

SLD-261-(a)-(b)-(c)-PD-670-FC/APC,
where: (a) – power category (HP1 or HP2),
(b) – package type (DBUT – standard),
(c) – type of fiber—SM (isotropic) or PM (polarization maintaining),
PD – monitor photodiode, FC/APC – connector type.

Example: SLD-261-HP2-DBUT-SM-PD-670-FC/APC

See the next page for performance examples ➔
TYPICAL PERFORMANCE EXAMPLES

SLD-261-HP2. Light-Current curve

Output power, mW

Forward current, mA

Spectrum at 10mW ex fiber

Spectral intensity, a.u.

Wavelength, nm

Extended displacement

Coherence function (10 log), dB

Mirror displacement, mm

Short displacement

Coherence function, a.u.

Mirror displacement, mm

Mirror displacement = Optical path difference / 2

Examples demonstrate typical performance only.
Actual performance may vary from sample to sample and from lot to lot.

All specifications are subject to change without notice.