

Datasheet for #sbcw26660 DN

Recommendations:

Please read the User Manual and have a look at the FAQ at <https://www.alpeslasers.ch/resources/#faq>

WARNING: Operating the laser with higher current or voltage than specified in this document may cause damage and will result in loss of warranty, unless Alpes Lasers has permitted to do so!

WARNING: Beware of the polarity of the laser. This laser has to be powered with negative bias and positive bias on the specific zones drawn below. To be used with a high compliance CW laser driver capable of reaching the operating current and voltage indicated in this datasheet, or up to 2.5A/20V.

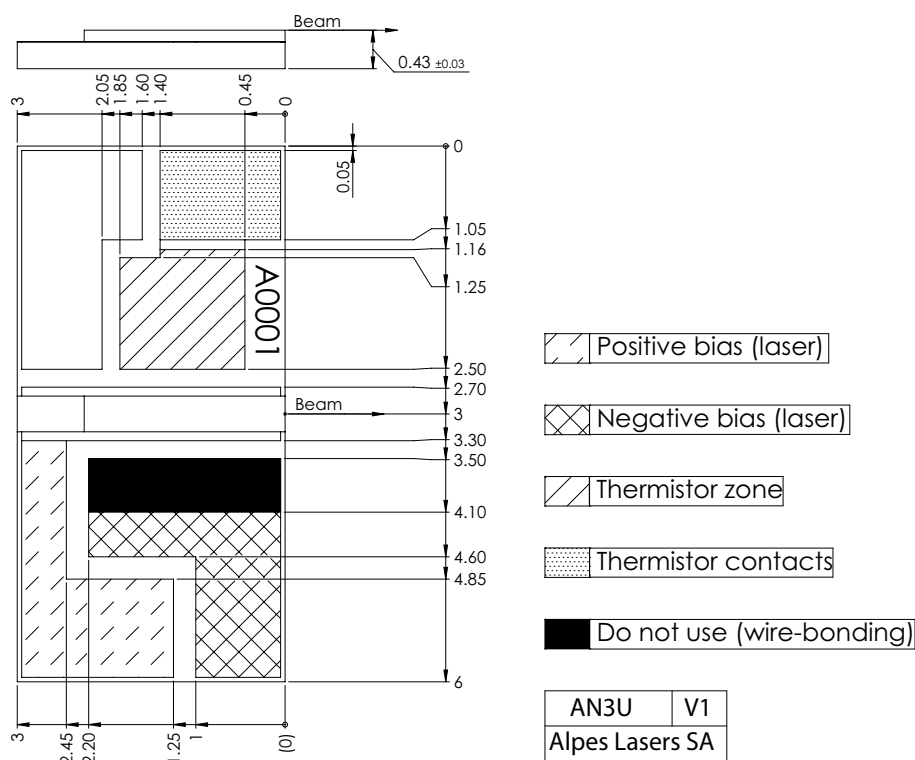


Figure 1: Mechanical and electrical interface for #sbcw26660 DN (please note that AlN submount numbering is A0W5N)

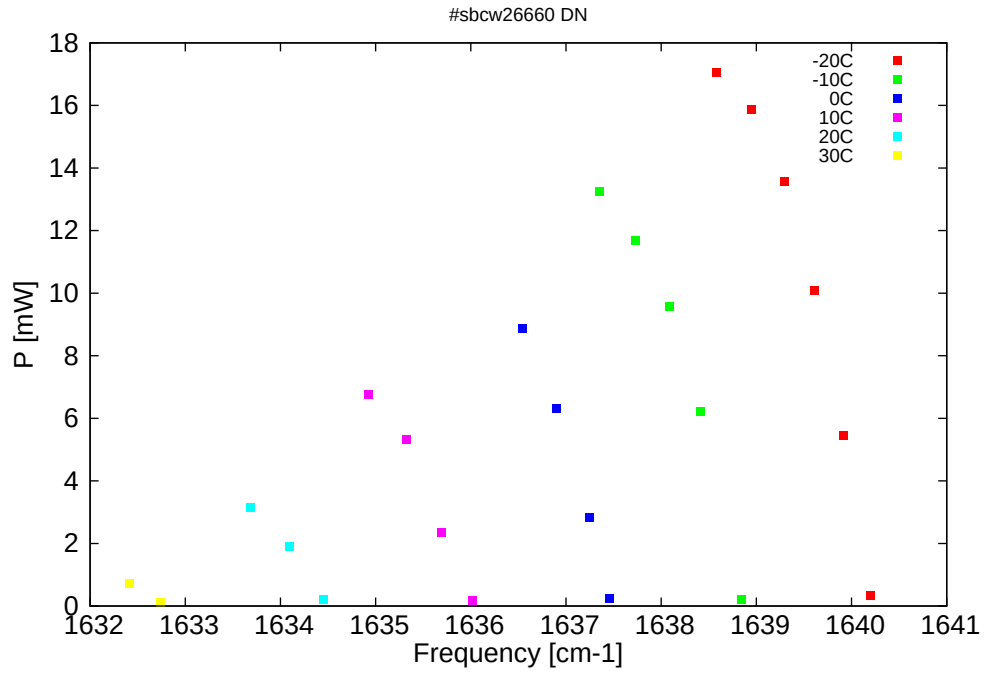


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

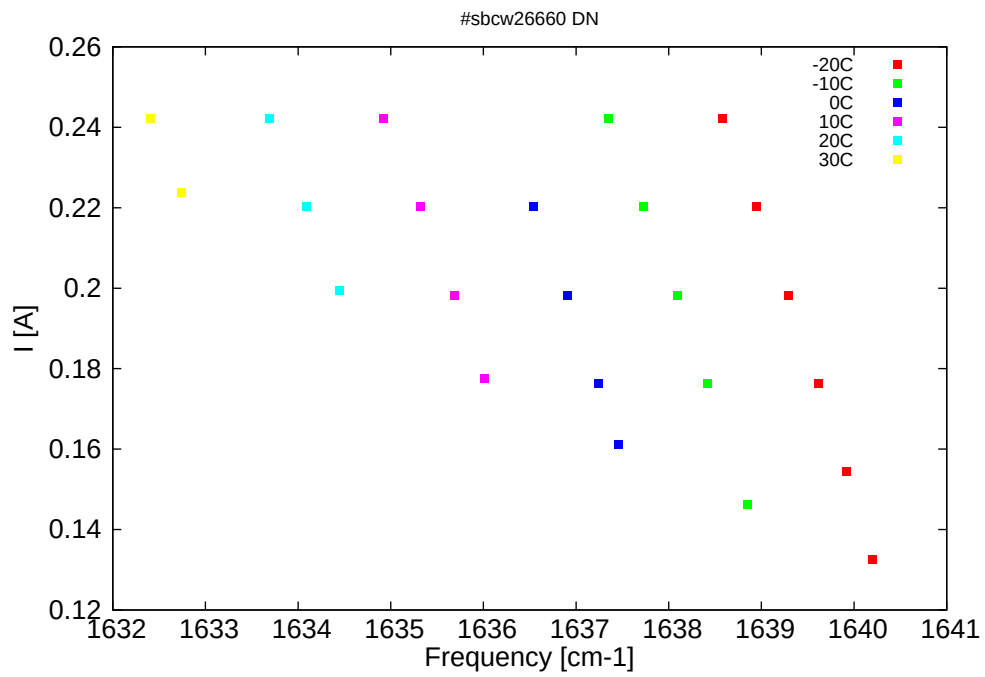


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
6096.8	1640.2	0.3	-20	9.9	0.133
6097.9	1639.9	5.5	-20	10.17	0.155
6099	1639.6	10.1	-20	10.44	0.176
6100.2	1639.3	13.6	-20	10.71	0.198
6101.5	1638.9	15.9	-20	10.98	0.22
6102.9	1638.6	17.1	-20	11.27	0.242
6101.9	1638.8	0.2	-10	10	0.146
6103.4	1638.4	6.2	-10	10.4	0.176
6104.7	1638.1	9.6	-10	10.68	0.198
6106	1637.7	11.7	-10	10.96	0.22
6107.4	1637.4	13.3	-10	11.24	0.242
6107	1637.5	0.2	0	10.09	0.161
6107.8	1637.2	2.8	0	10.29	0.176
6109.1	1636.9	6.3	0	10.56	0.198
6110.4	1636.5	8.9	0	10.83	0.22
6112.4	1636	0.2	10	10.38	0.178
6113.6	1635.7	2.4	10	10.57	0.198
6115	1635.3	5.3	10	10.8	0.22
6116.5	1634.9	6.8	10	11.1	0.242
6118.3	1634.5	0.2	20	10.49	0.199
6119.6	1634.1	1.9	20	10.76	0.22
6121.1	1633.7	3.2	20	11.06	0.242
6124.7	1632.7	0.1	30	10.64	0.224
6125.9	1632.4	0.7	30	10.83	0.242

Table 1: Singlemode optical output power as function of operating parameters.

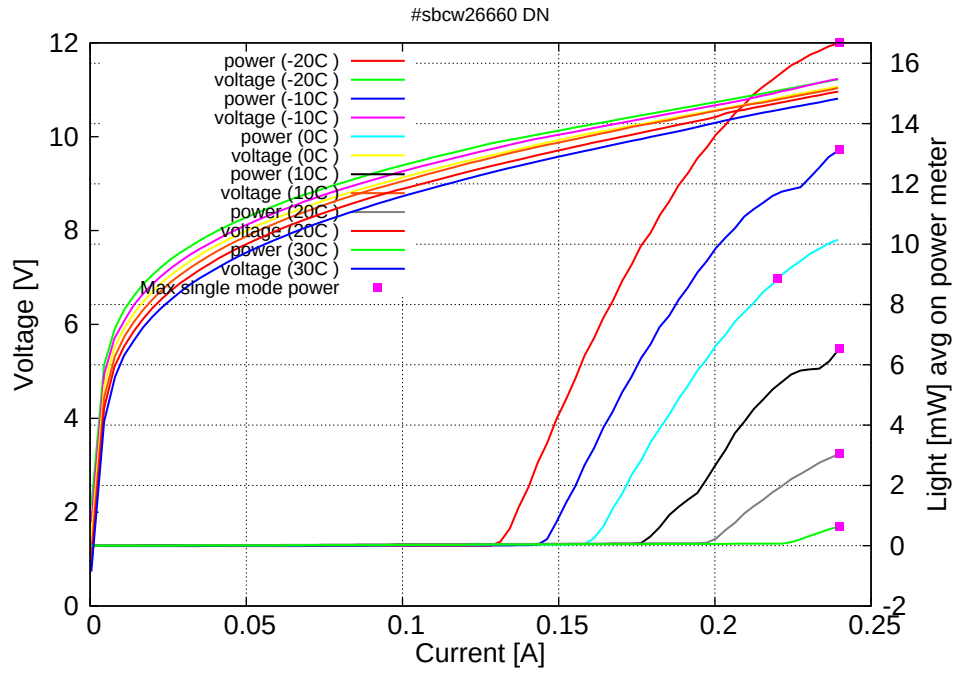


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.13A$ / $V_{th}=9.9V$ (2-wires measurements). Maximum operation current: 0.24A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

