

Datasheet for #sbcw26665 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 #sbcw26665 DN (please note that AlN submount numbering is A0UVN)

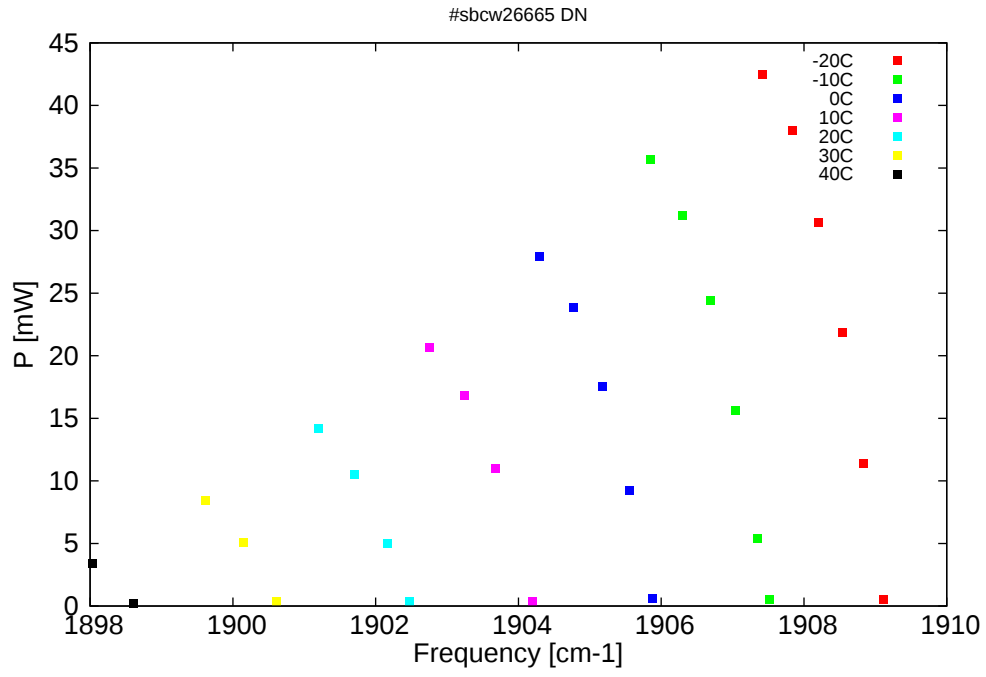


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

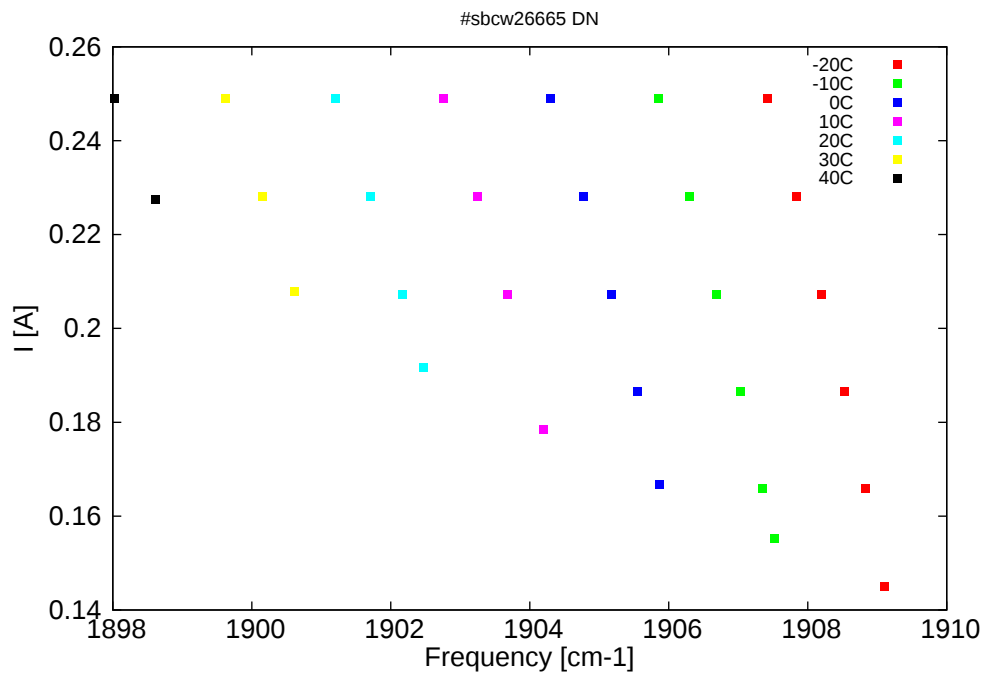


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
5238	1909.1	0.5	-20	7.83	0.145
5238.8	1908.8	11.4	-20	8.02	0.166
5239.6	1908.5	21.9	-20	8.21	0.187
5240.5	1908.2	30.7	-20	8.41	0.207
5241.5	1907.8	38	-20	8.64	0.228
5242.7	1907.4	42.5	-20	8.88	0.249
5242.4	1907.5	0.5	-10	7.89	0.155
5242.9	1907.4	5.4	-10	8	0.166
5243.7	1907	15.6	-10	8.19	0.187
5244.7	1906.7	24.4	-10	8.4	0.207
5245.8	1906.3	31.2	-10	8.62	0.228
5247	1905.8	35.7	-10	8.87	0.249
5246.9	1905.9	0.6	0	7.98	0.167
5247.8	1905.6	9.2	0	8.17	0.187
5248.8	1905.2	17.5	0	8.38	0.207
5250	1904.8	23.8	0	8.61	0.228
5251.3	1904.3	28	0	8.86	0.249
5251.6	1904.2	0.4	10	8.07	0.178
5253	1903.7	11	10	8.36	0.207
5254.2	1903.2	16.8	10	8.6	0.228
5255.5	1902.8	20.7	10	8.85	0.249
5256.3	1902.5	0.4	20	8.17	0.192
5257.2	1902.2	5	20	8.33	0.207
5258.4	1901.7	10.5	20	8.57	0.228
5259.8	1901.2	14.2	20	8.82	0.249
5261.5	1900.6	0.4	30	8.35	0.208
5262.7	1900.1	5.1	30	8.58	0.228
5264.2	1899.6	8.4	30	8.84	0.249
5267	1898.6	0.2	40	8.55	0.227
5268.6	1898	3.4	40	8.82	0.249

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

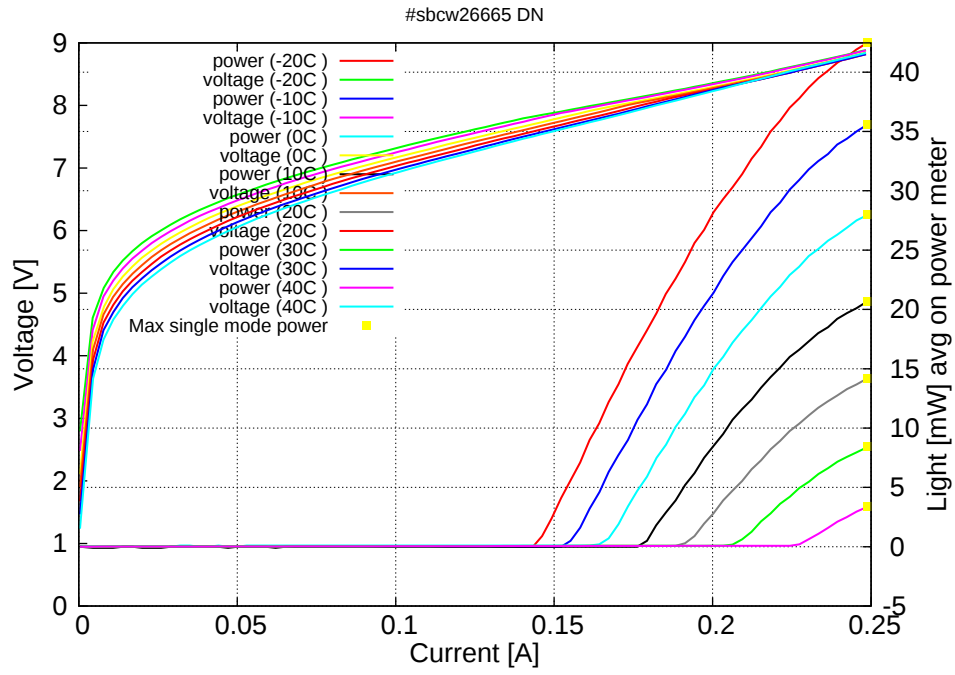


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.14A$ / $V_{th}=7.8V$ (2-wires measurements). Maximum operation current: 0.25A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

