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Datasheet for #sbcw26654 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.

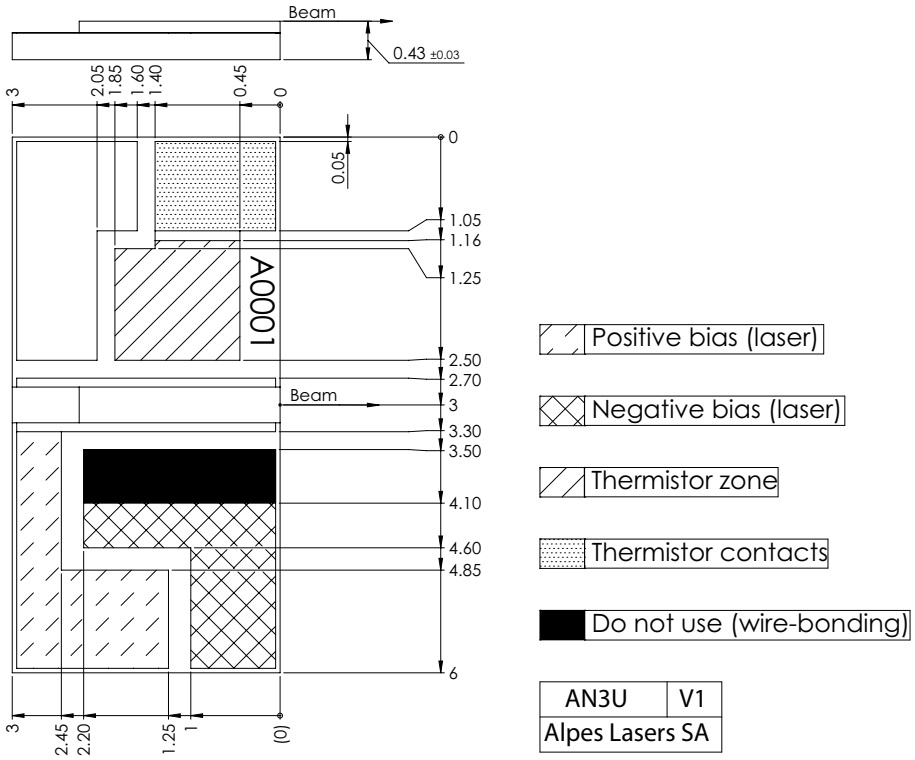

Figure 1: Mechanical and electrical interface for #sbcw26654 DN (please note that AlN submount numbering is A0VVG)

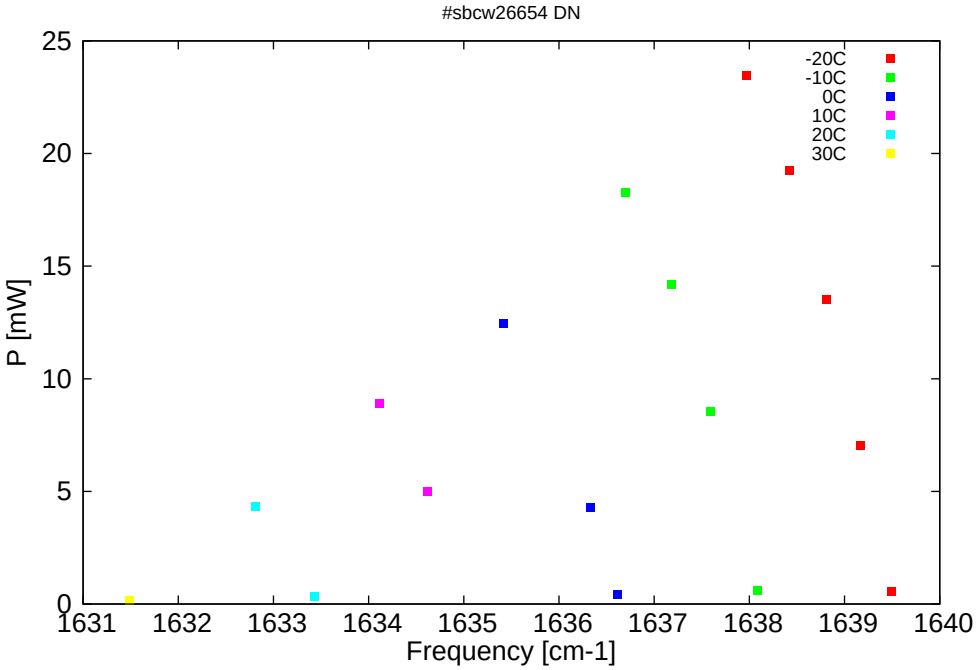

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

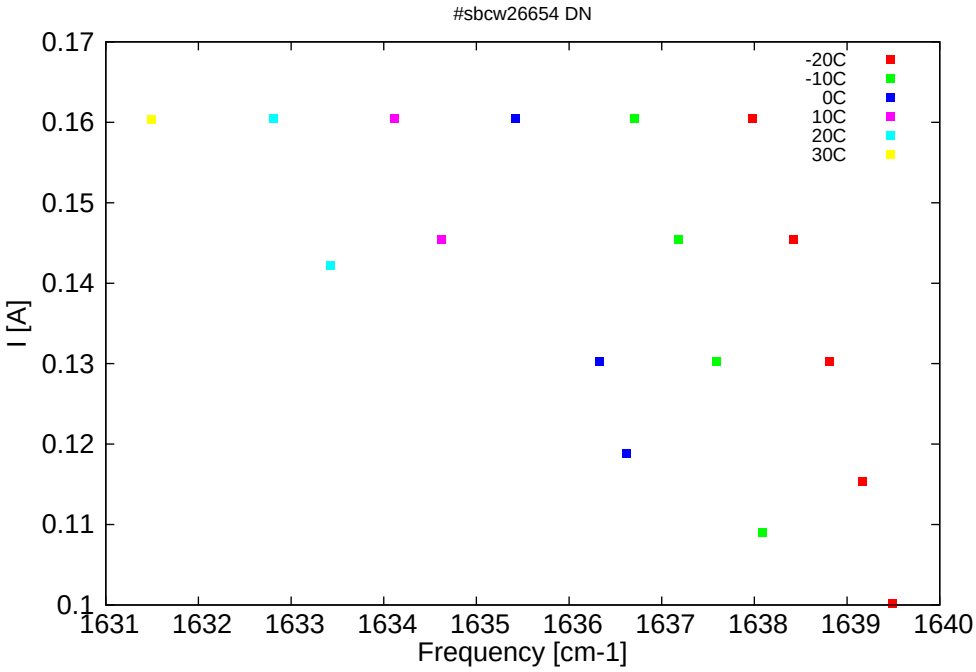

Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{LASER}$[V]	I[A]
6099.5	1639.5	0.5	-20	9.9	0.1
6100.7	1639.2	7.1	-20	10.19	0.115
6102	1638.8	13.5	-20	10.49	0.13
6103.4	1638.4	19.2	-20	10.8	0.145
6105.1	1638	23.4	-20	11.13	0.161
6104.7	1638.1	0.6	-10	10.02	0.109
6106.5	1637.6	8.6	-10	10.44	0.13
6108.1	1637.2	14.2	-10	10.75	0.145
6109.8	1636.7	18.3	-10	11.09	0.161
6110.2	1636.6	0.4	0	10.15	0.119
6111.3	1636.3	4.3	0	10.38	0.13
6114.6	1635.4	12.5	0	11.04	0.161
6117.6	1634.6	5	10	10.64	0.145
6119.5	1634.1	8.9	10	10.99	0.161
6122.1	1633.4	0.3	20	10.53	0.142
6124.4	1632.8	4.3	20	10.94	0.161
6129.4	1631.5	0.2	30	10.89	0.16

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

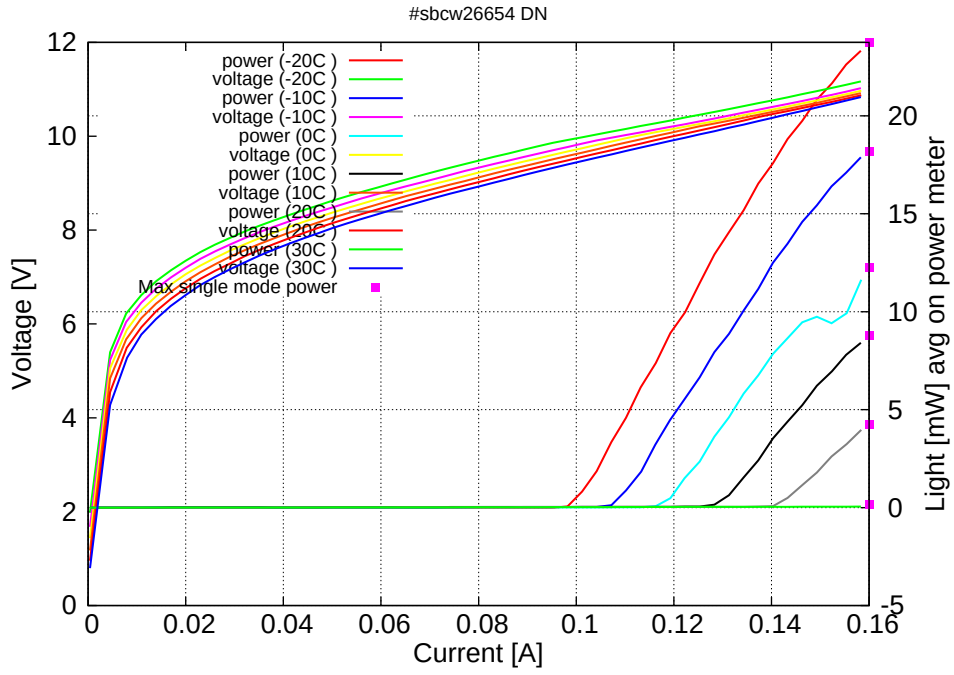

Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: Ith=0.10A / Vth=9.9V (2-wires measurements). Maximum operation current: 0.16A for all temperatures.

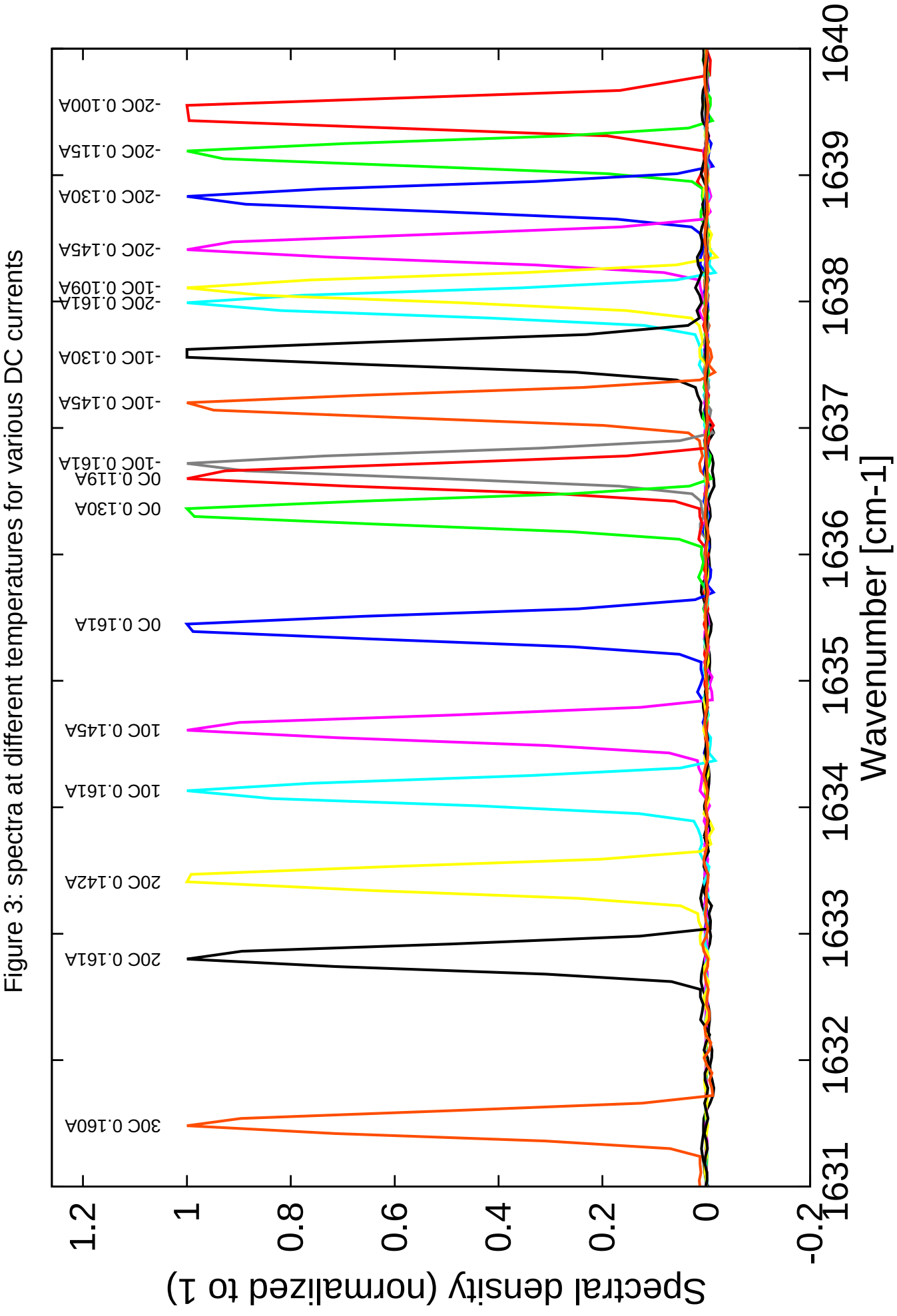

Figure 3: spectra at different temperatures for various DC currents