

Datasheet for #sbcw26652 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.

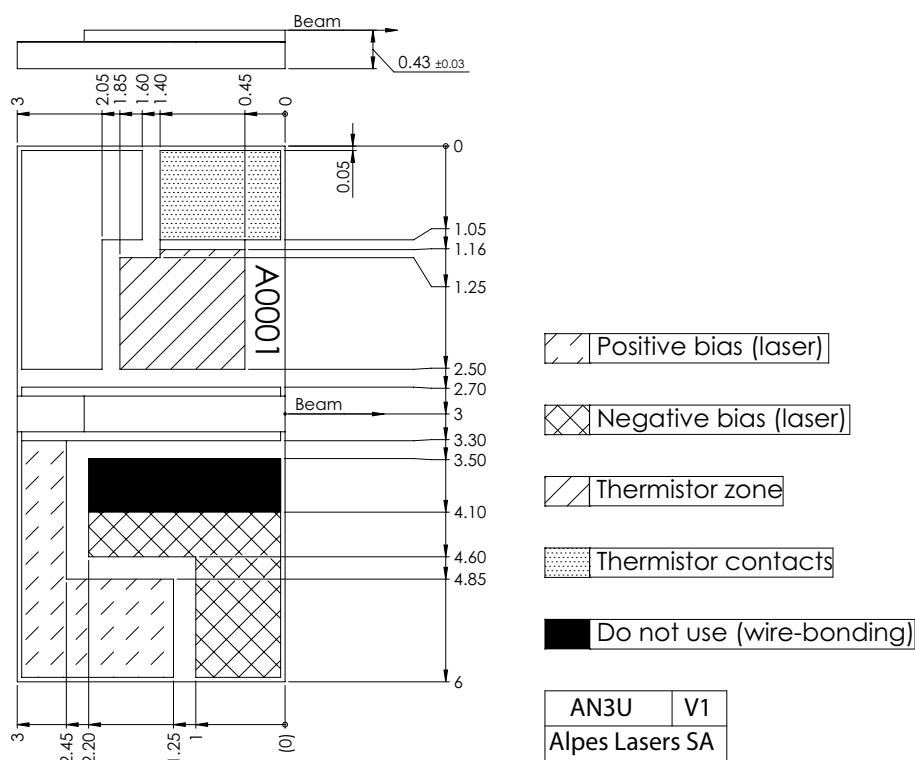


Figure 1: Mechanical and electrical interface for #sbcw26652 DN (please note that AlN submount numbering is A0VW8)

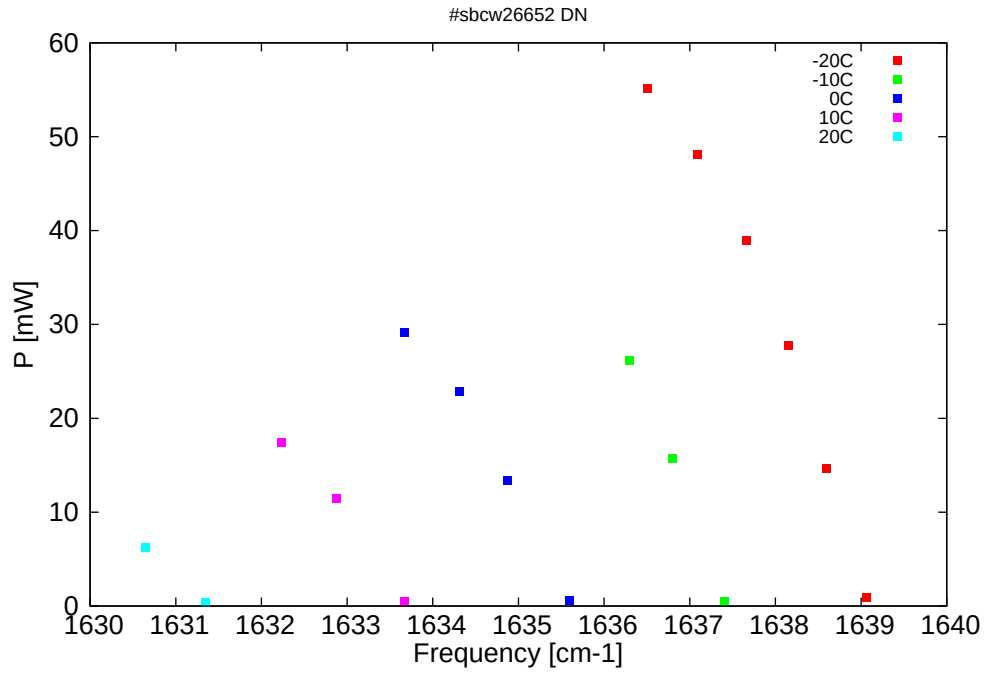


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

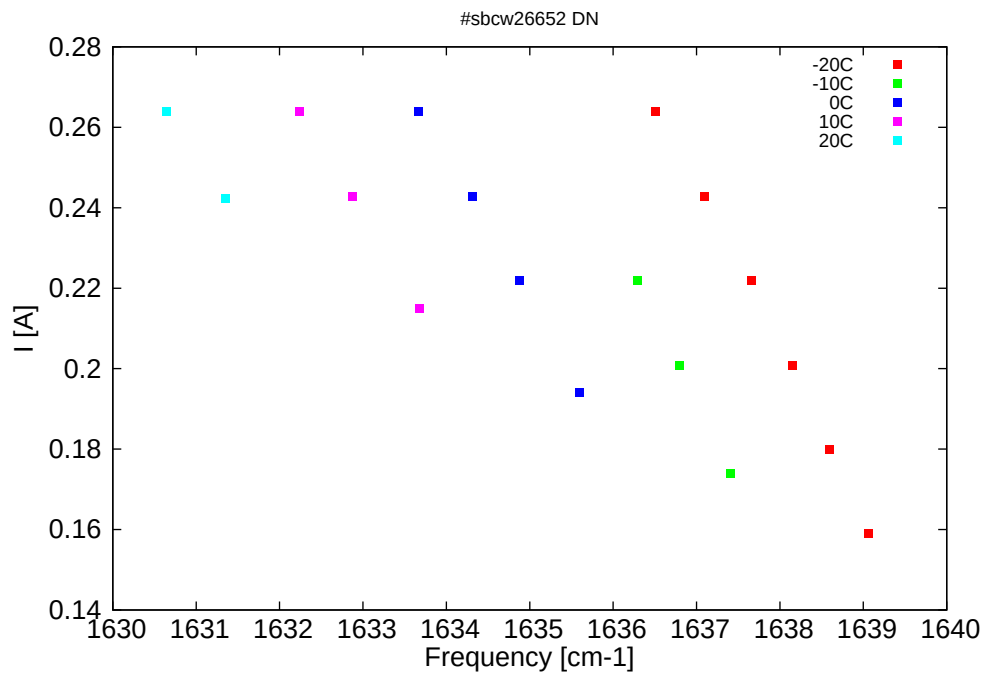


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
6101	1639.1	0.9	-20	9.67	0.159
6102.8	1638.6	14.6	-20	9.92	0.18
6104.5	1638.1	27.7	-20	10.16	0.201
6106.3	1637.7	39	-20	10.41	0.222
6108.4	1637.1	48.1	-20	10.66	0.243
6110.6	1636.5	55.1	-20	10.91	0.264
6107.2	1637.4	0.5	-10	9.8	0.174
6109.5	1636.8	15.7	-10	10.12	0.201
6111.4	1636.3	26.2	-10	10.36	0.222
6114	1635.6	0.6	0	9.97	0.194
6116.7	1634.9	13.4	0	10.3	0.222
6118.8	1634.3	22.9	0	10.56	0.243
6121.2	1633.7	29.2	0	10.83	0.264
6121.2	1633.7	0.5	10	10.17	0.215
6124.2	1632.9	11.5	10	10.51	0.243
6126.6	1632.2	17.4	10	10.78	0.264
6129.9	1631.3	0.4	20	10.46	0.242
6132.6	1630.6	6.2	20	10.72	0.264

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

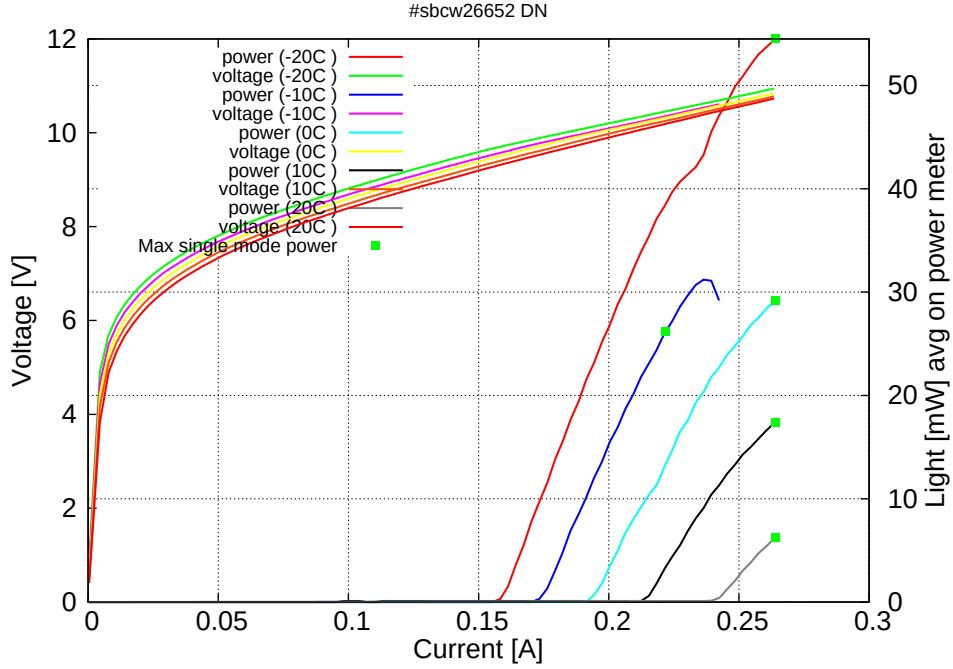


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20°C: $I_{th}=0.16A$ / $V_{th}=9.6V$ (2-wires measurements). Maximum operation current: 0.265A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

