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Datasheet for #sbcw24663 DN

Recommendations:

Please read the User Manual and have a look at the FAQ at
`http://www.alpeslasers.ch/?a=142`

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.

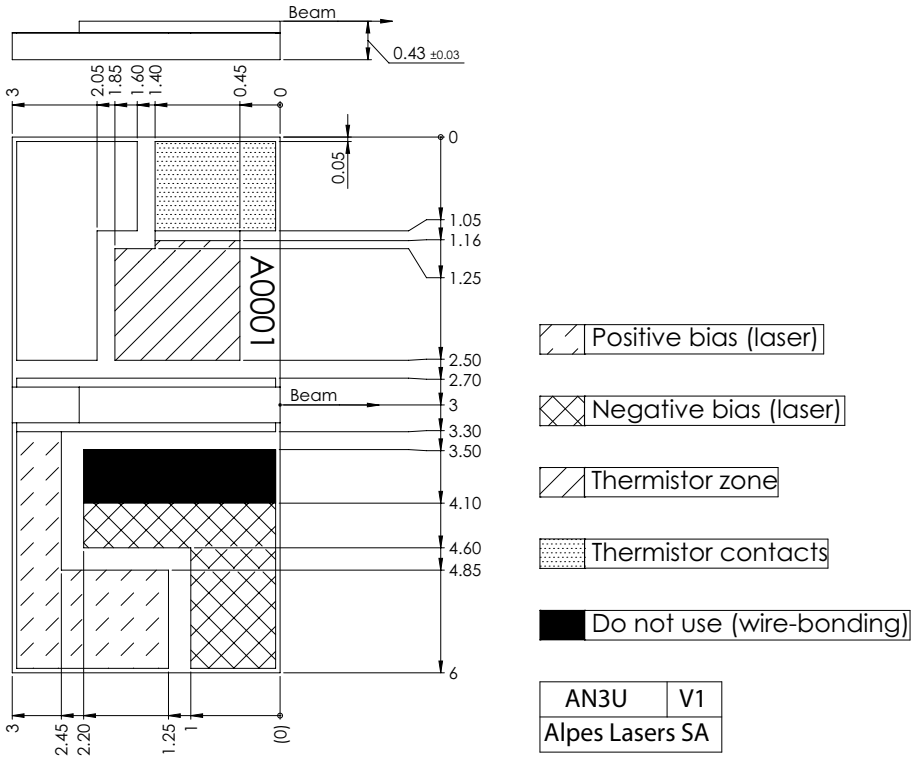

Figure 1: Mechanical and electrical interface for #sbcw24663 DN (please note that AlN submount numbering is A104R)

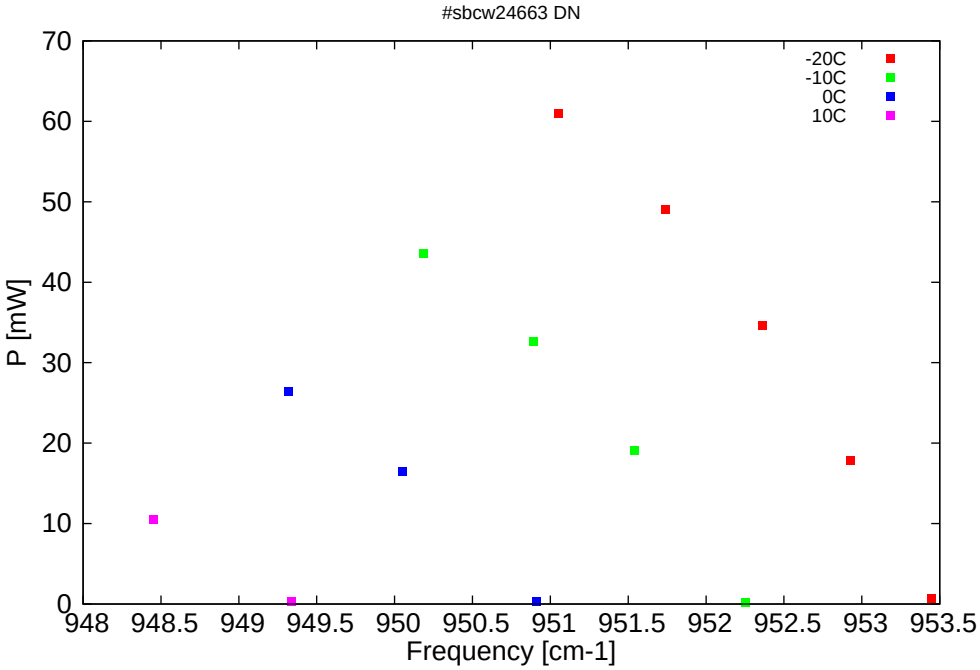

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

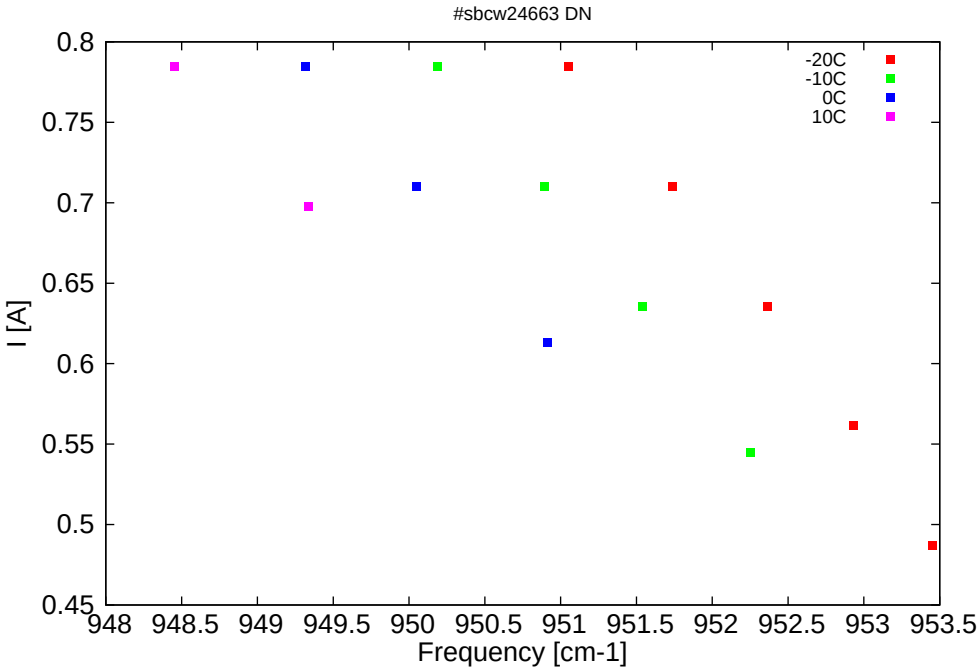

Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{LASER}$[V]	I[A]
10488.2	953.4	0.6	-20	9.11	0.487
10494	952.9	17.9	-20	9.45	0.561
10500.2	952.4	34.6	-20	9.78	0.636
10507.1	951.7	49	-20	10.11	0.71
10514.7	951.1	61	-20	10.43	0.785
10501.4	952.3	0.2	-10	9.27	0.545
10509.3	951.5	19	-10	9.68	0.636
10516.4	950.9	32.6	-10	10.01	0.71
10524.2	950.2	43.5	-10	10.34	0.785
10516.2	950.9	0.3	0	9.49	0.613
10525.7	950.1	16.5	0	9.92	0.71
10533.9	949.3	26.4	0	10.26	0.785
10533.7	949.3	0.3	10	9.78	0.698
10543.5	948.5	10.6	10	10.18	0.785

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

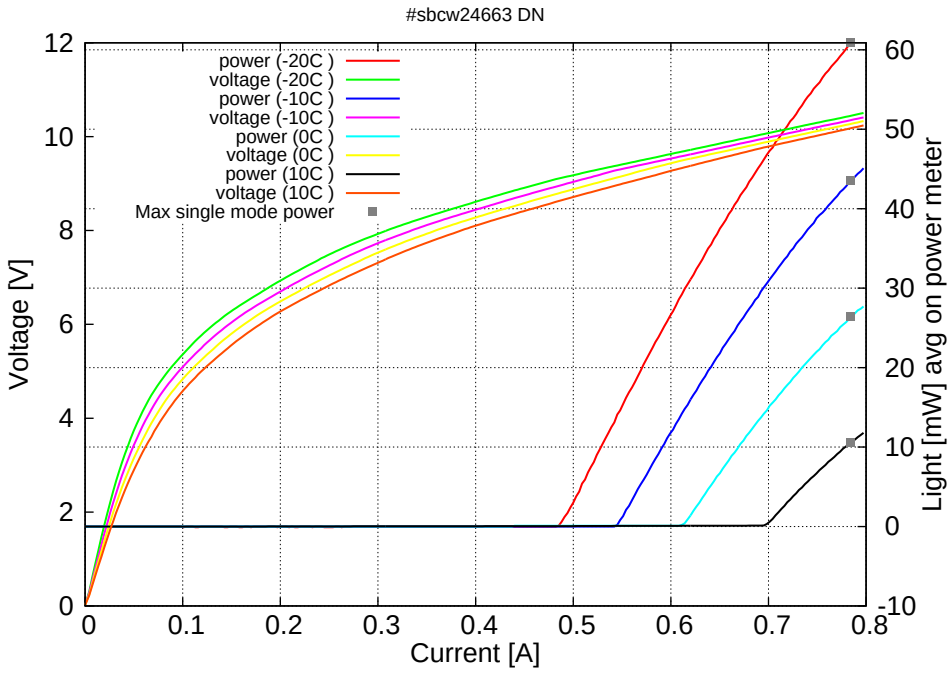

Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: Ith=0.48A / Vth=9.1V (2-wires measurements). Maximum operation current: 0.800A for all temperatures.

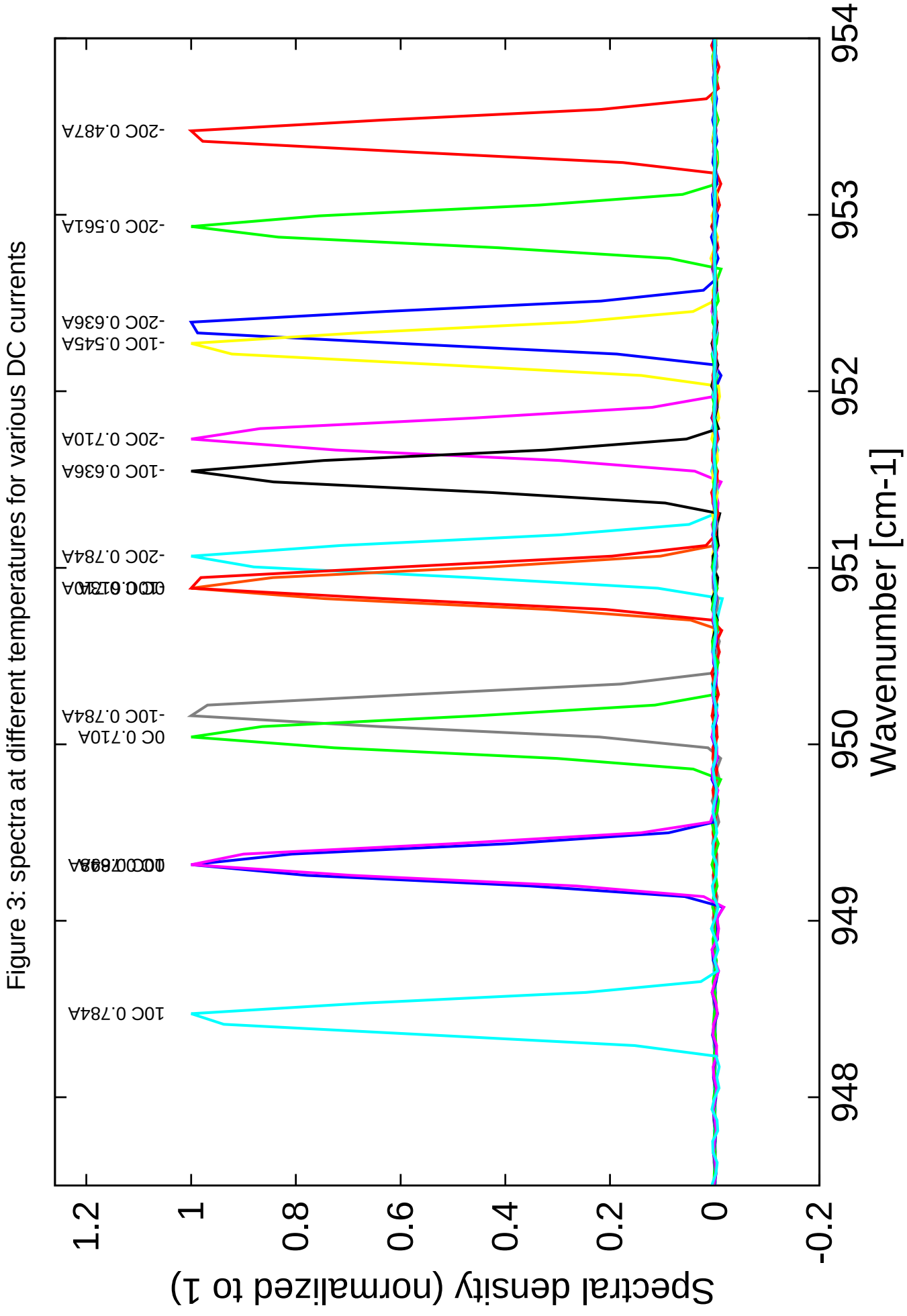

Figure 3: spectra at different temperatures for various DC currents