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Datasheet for #sbcw12383 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 current on the laser contact (= bonding pad, corresponding to the label "laser" on the LLH) and the positive current on the base contact (= submount, corresponding to the label "base" on the LLH). To use with a power-supply ILX Lightwave LDX-3232 or equivalent.

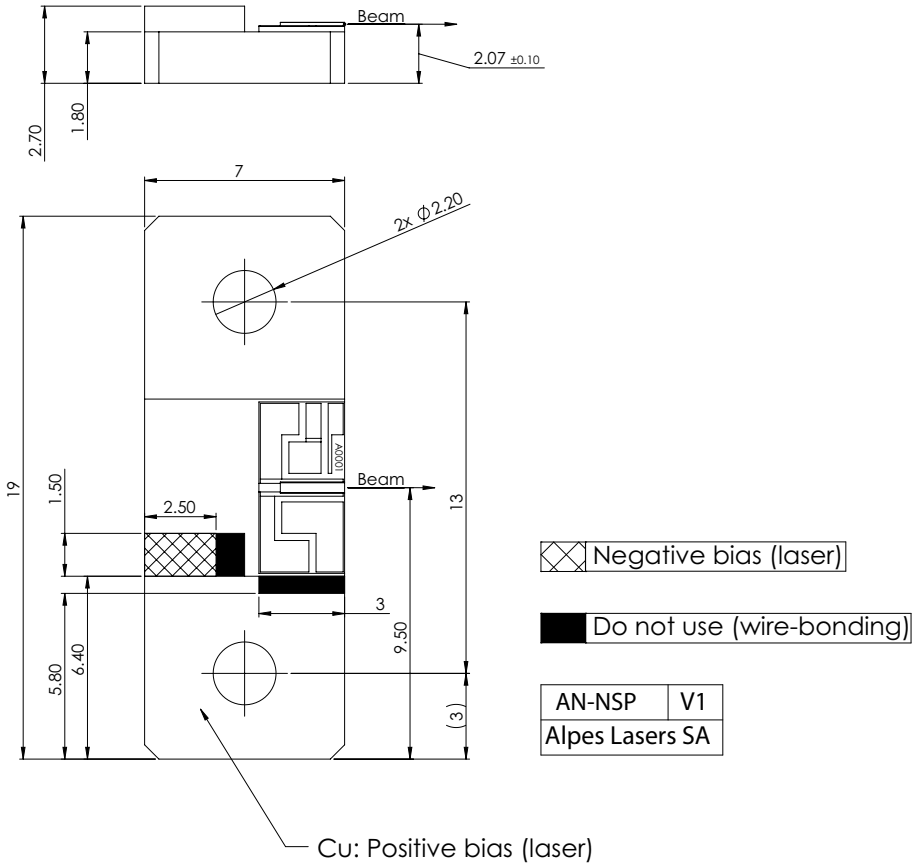

Figure 1: Support mounting for #sbcw12383 DN

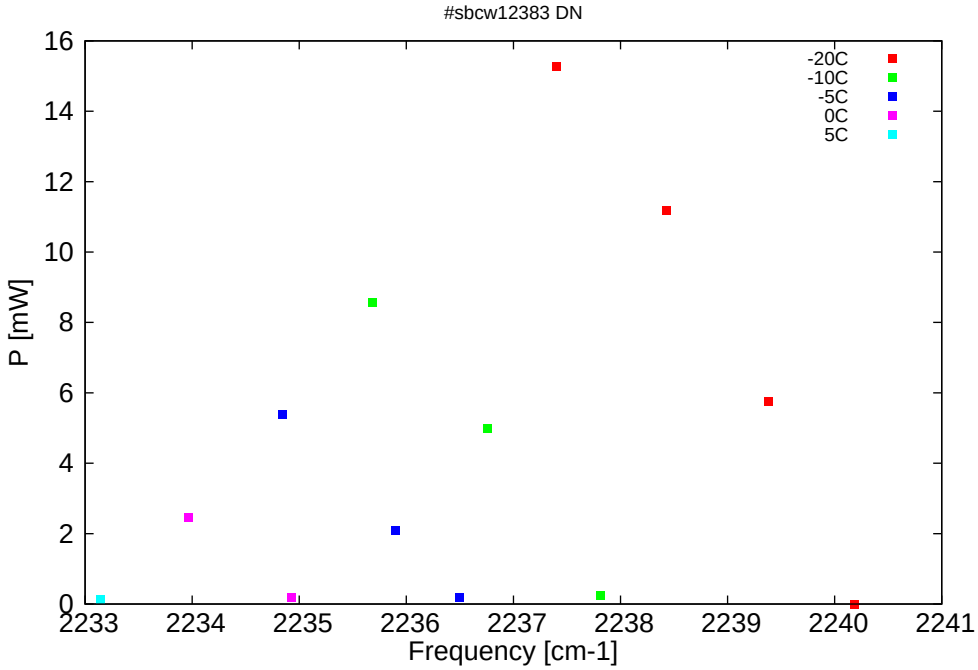

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

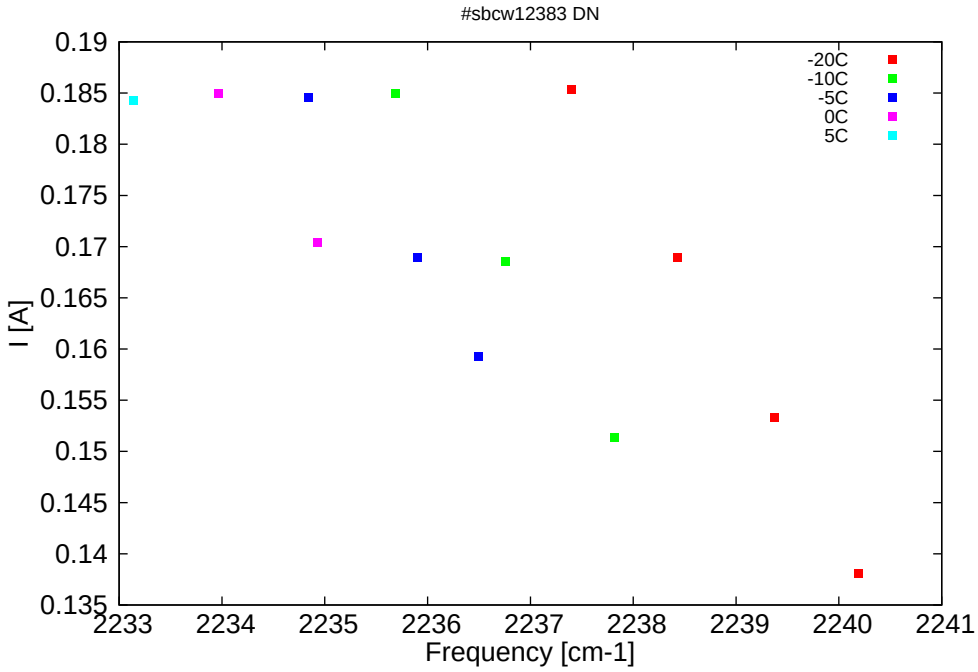

Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{LASER}$[V]	I[A]
4463.9	2240.2	0	-20	9.1	0.14
4465.5	2239.4	5.8	-20	9.3	0.15
4467.4	2238.4	11.2	-20	9.5	0.17
4469.5	2237.4	15.3	-20	9.7	0.19
4468.6	2237.8	0.2	-10	9.3	0.15
4470.7	2236.8	5	-10	9.5	0.17
4472.9	2235.7	8.6	-10	9.7	0.19
4471.3	2236.5	0.2	-5	9.4	0.16
4472.5	2235.9	2.1	-5	9.5	0.17
4474.6	2234.8	5.4	-5	9.7	0.18
4474.4	2234.9	0.2	0	9.5	0.17
4476.3	2234	2.5	0	9.7	0.18
4478	2233.1	0.1	5	9.7	0.18

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

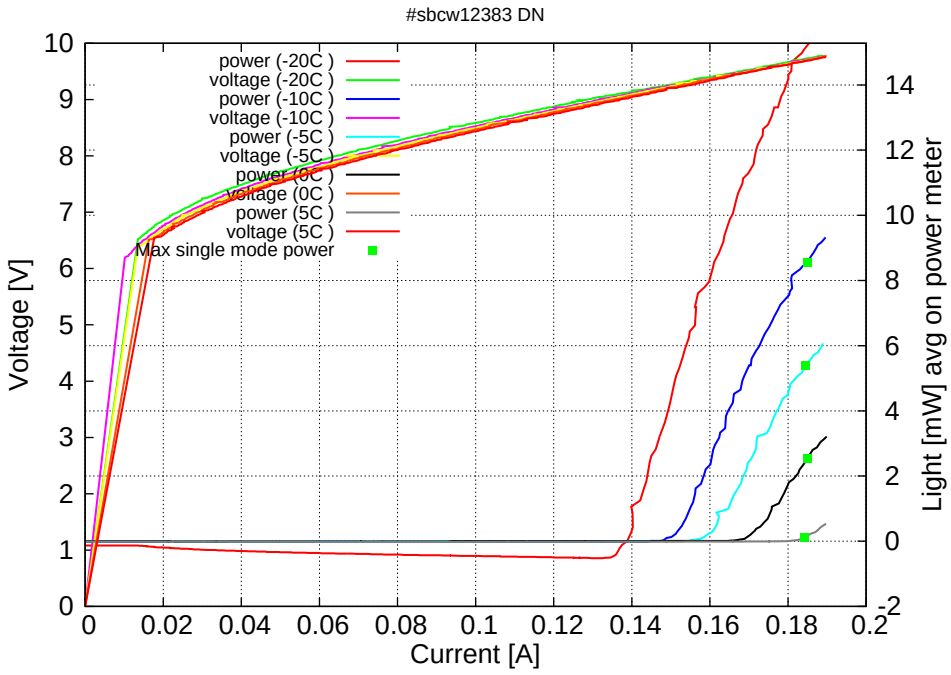

Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: Ith=0.135A / Vth=9.1V (2-wires measurements). Maximum operation current: 0.190A for all temperatures.

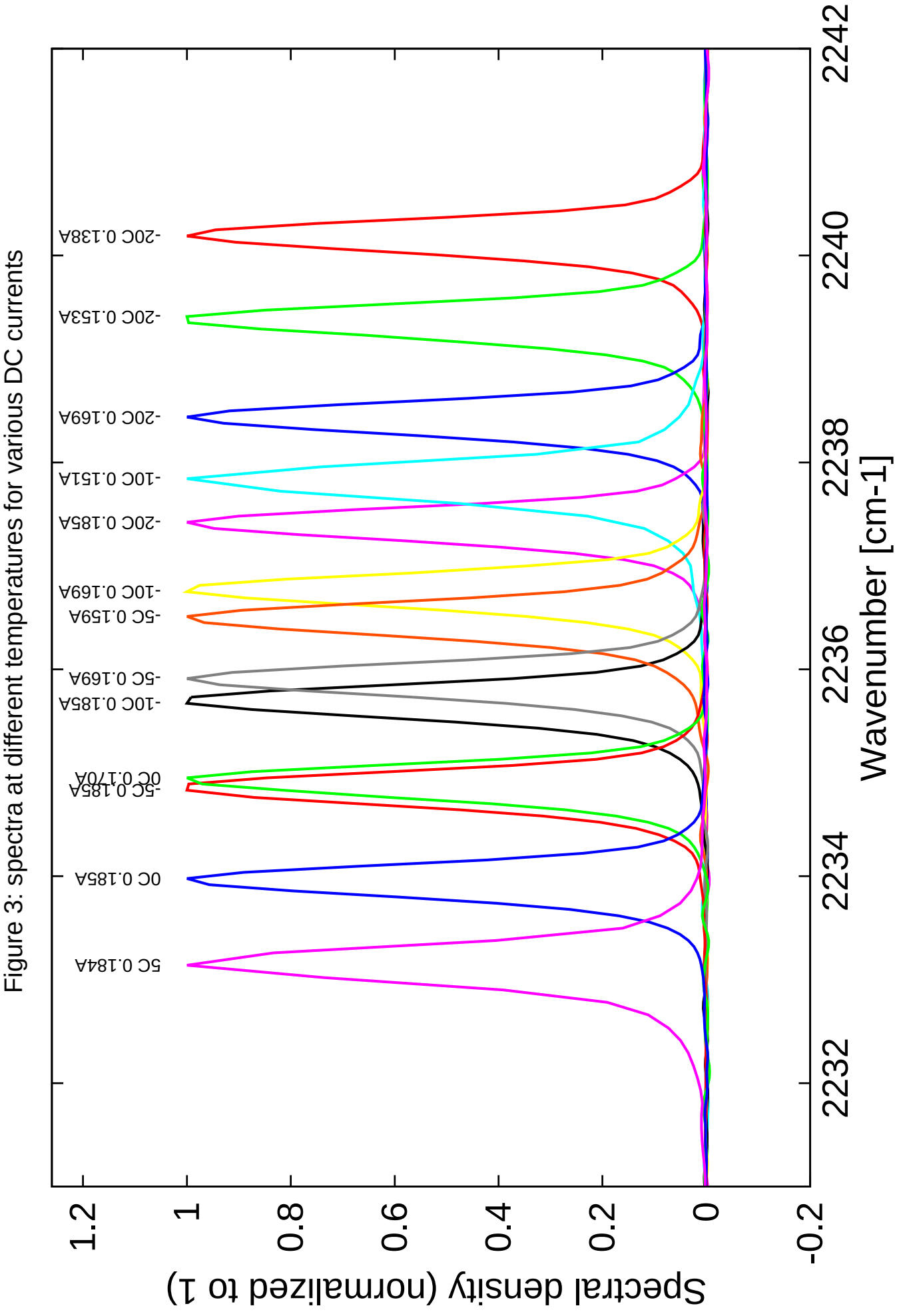

Figure 3: spectra at different temperatures for various DC currents