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Datasheet for #sbcw12029 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 use with an ILX Lightwave LDX-3232 laser driver, or equivalent.

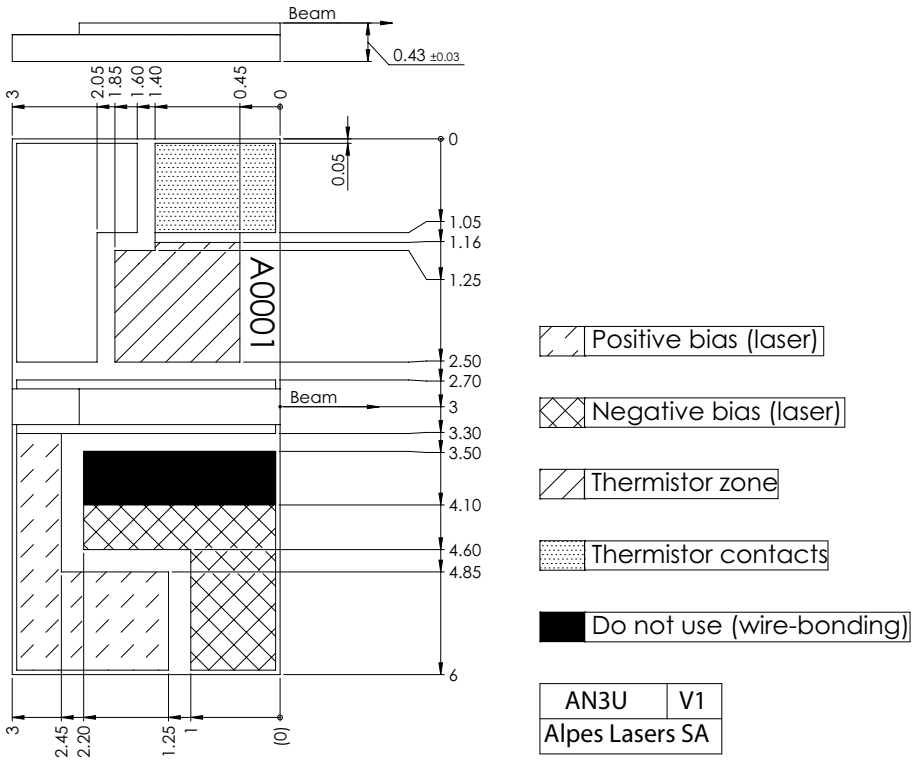

Figure 1: Support mounting for #sbcw12029 DN (please note that AlN submount numbering is A0661)

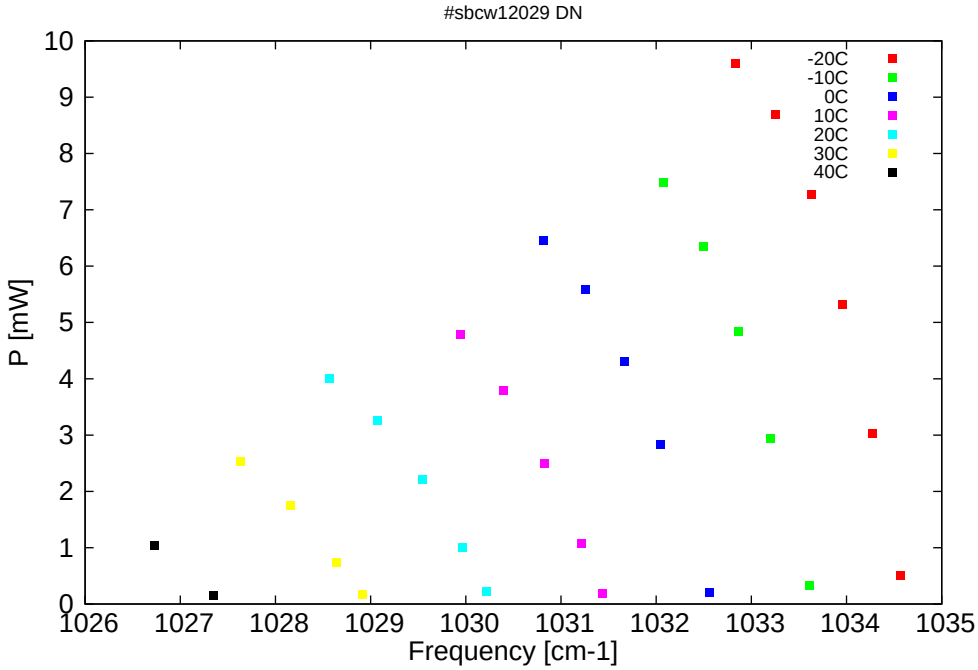

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

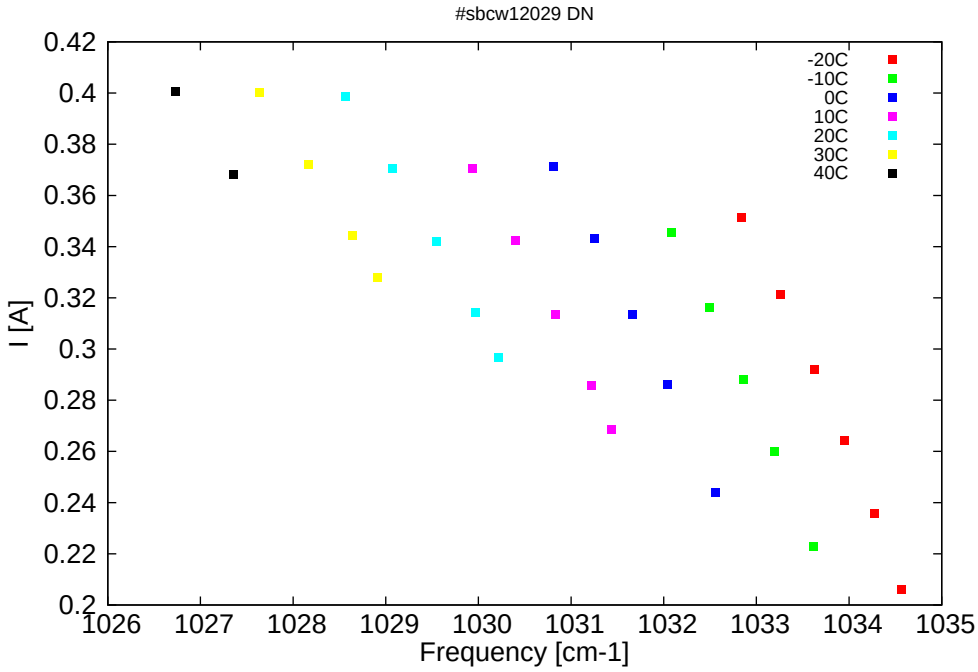

Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{LASER}$[V]	I[A]
9665.9	1034.6	0.5	-20	9.3	0.21
9668.6	1034.3	3	-20	9.7	0.24
9671.6	1034	5.3	-20	10	0.26
9674.7	1033.6	7.3	-20	10.4	0.29
9678.1	1033.3	8.7	-20	10.8	0.32
9682.1	1032.8	9.6	-20	11.2	0.35
9674.8	1033.6	0.3	-10	9.4	0.22
9678.7	1033.2	2.9	-10	9.9	0.26
9681.8	1032.9	4.8	-10	10.2	0.29
9685.3	1032.5	6.3	-10	10.6	0.32
9689.2	1032.1	7.5	-10	11	0.35
9684.6	1032.6	0.2	0	9.6	0.24
9689.5	1032	2.8	0	10.1	0.29
9693.1	1031.7	4.3	0	10.5	0.31
9696.9	1031.3	5.6	0	10.8	0.34
9701.1	1030.8	6.5	0	11.2	0.37
9695.2	1031.4	0.2	10	9.8	0.27
9697.3	1031.2	1.1	10	10	0.29
9701	1030.8	2.5	10	10.4	0.31
9705	1030.4	3.8	10	10.7	0.34
9709.3	1029.9	4.8	10	11.1	0.37
9706.7	1030.2	0.2	20	10.1	0.3
9709	1030	1	20	10.3	0.31
9713	1029.5	2.2	20	10.6	0.34
9717.5	1029.1	3.3	20	11	0.37
9722.3	1028.6	4	20	11.4	0.4
9719	1028.9	0.2	30	10.3	0.33
9721.6	1028.6	0.7	30	10.6	0.34
9726.1	1028.2	1.8	30	10.9	0.37
9731.1	1027.6	2.5	30	11.3	0.4
9733.8	1027.4	0.2	40	10.8	0.37
9739.6	1026.7	1	40	11.2	0.4

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

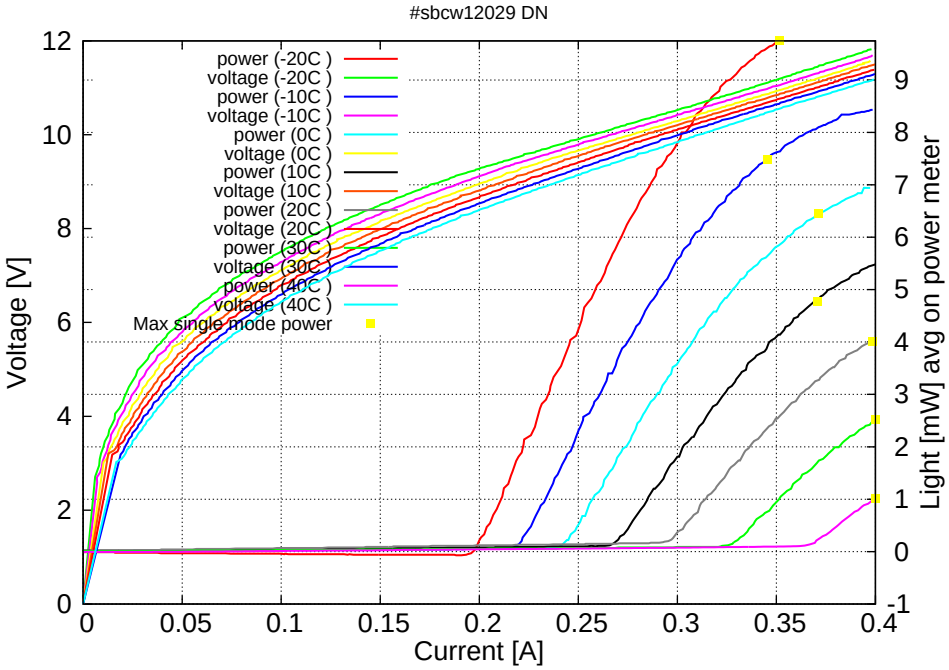

Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: Ith=0.20A / Vth=9.3V (2-wires measurements). Maximum operation current: 0.35A between -20C and -10C, 0.37A between 0C and 10C, 0.40A between 20C and 40C.

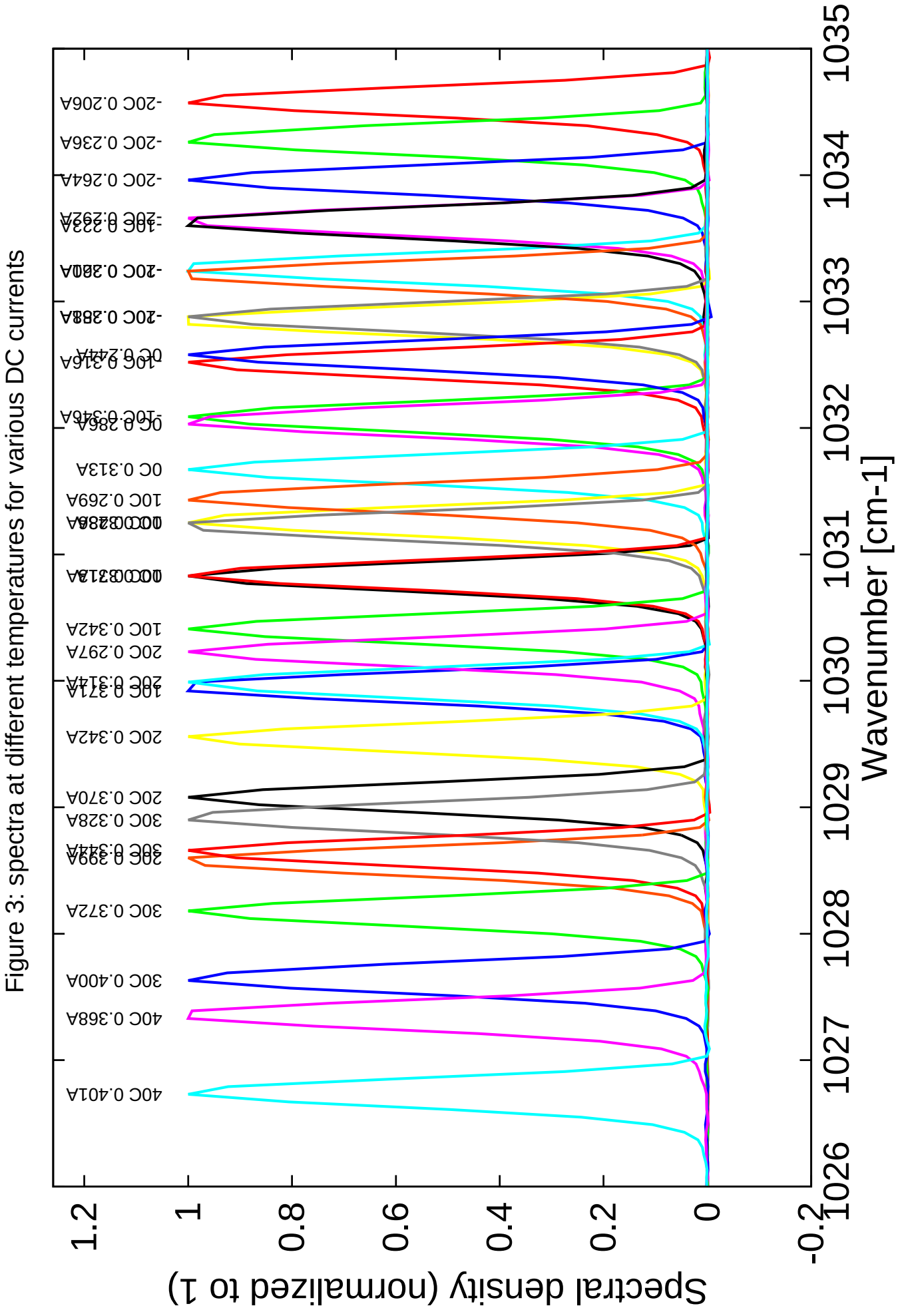

Figure 3: spectra at different temperatures for various DC currents