ALPES LASERS

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Datasheet for #sbcw10437 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.

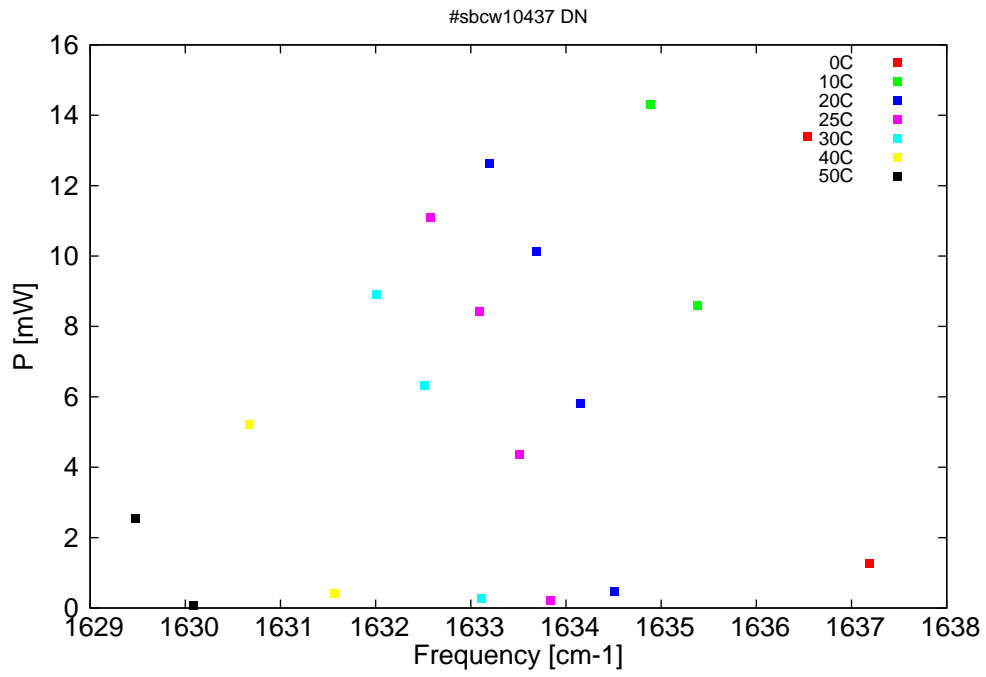Figure 1: Support mounting for #sbcw10437 DN

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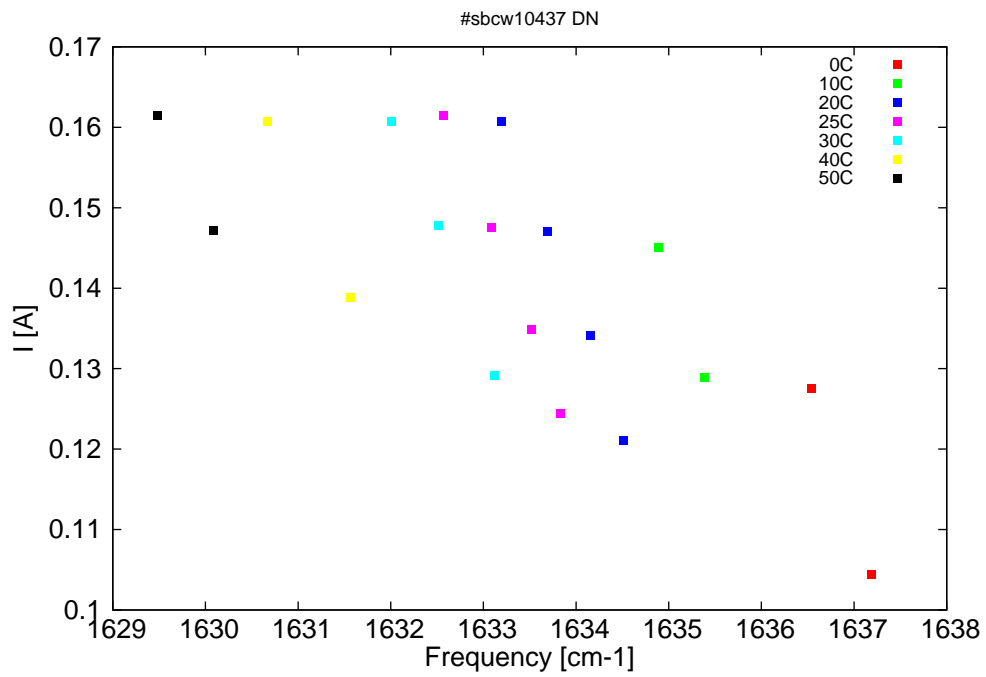

Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

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#sbcw10437 DN

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{LASER}$[V]	I[A]
6108	1637.2	1.3	0	9.4	0.1
6110.5	1636.5	13.4	0	9.8	0.13
6114.8	1635.4	8.6	10	9.8	0.13
6116.6	1634.9	14.3	10	10.1	0.15
6118	1634.5	0.5	20	9.6	0.12
6119.4	1634.2	5.8	20	9.8	0.13
6121.1	1633.7	10.1	20	10.1	0.15
6123	1633.2	12.6	20	10.3	0.16
6120.6	1633.8	0.2	25	9.7	0.12
6121.8	1633.5	4.4	25	9.8	0.13
6123.4	1633.1	8.4	25	10	0.15
6125.3	1632.6	11.1	25	10.3	0.16
6123.3	1633.1	0.3	30	9.7	0.13
6125.5	1632.5	6.3	30	10	0.15
6127.4	1632	8.9	30	10.3	0.16
6129.1	1631.6	0.4	40	9.8	0.14
6132.4	1630.7	5.2	40	10.2	0.16
6134.6	1630.1	0.1	50	9.9	0.15
6136.9	1629.5	2.6	50	10.2	0.16

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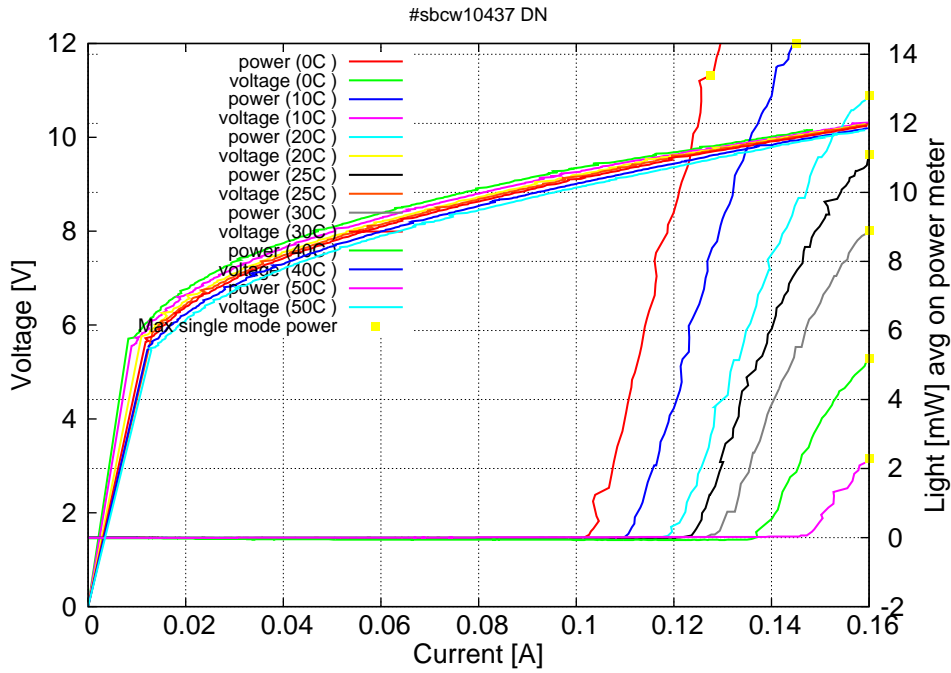

Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -30C: Ith=0.10A / Vth=9.4V (2-wires measurements). Maximum operation current: 0.145A between 0C and 10C, 0.16A between 20C and 50C.

Figure 3: spectra at different temperatures for various DC currents