

Datasheet for #sbcw26117 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 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 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.

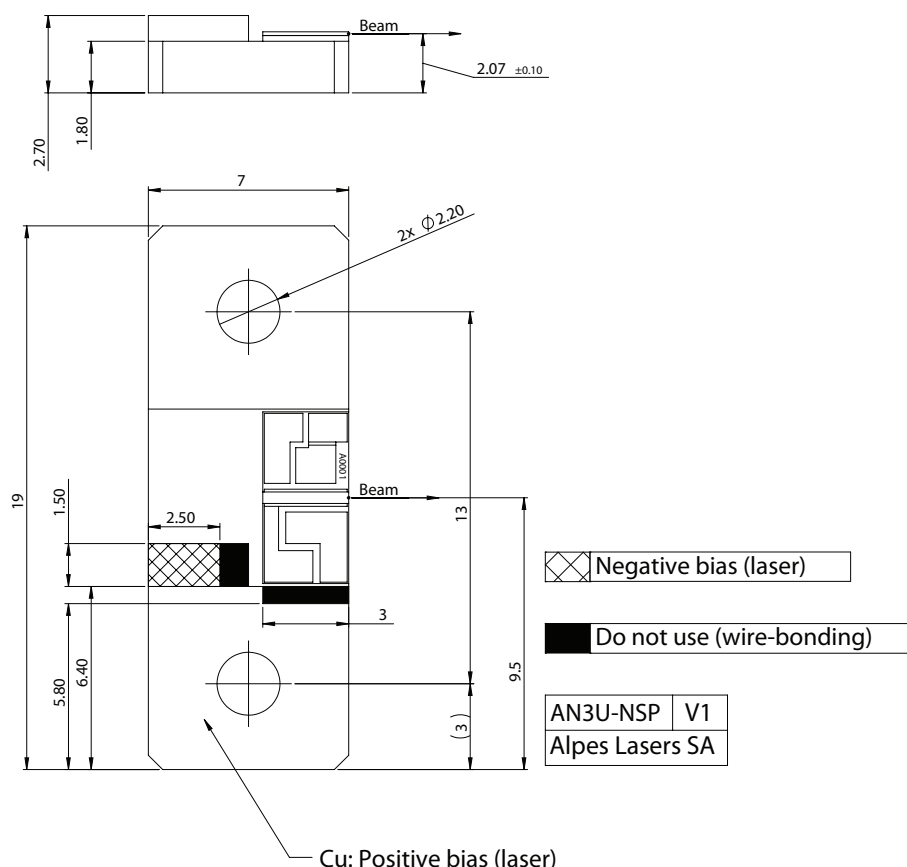


Figure 1: Mechanical and electrical interface for #sbcw26117 DN

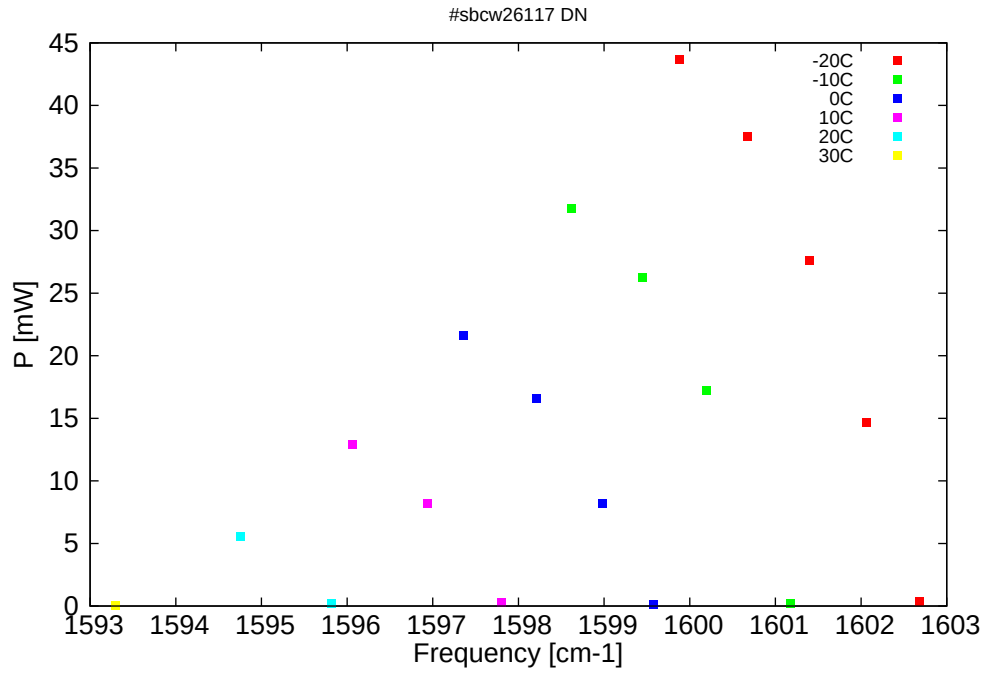


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

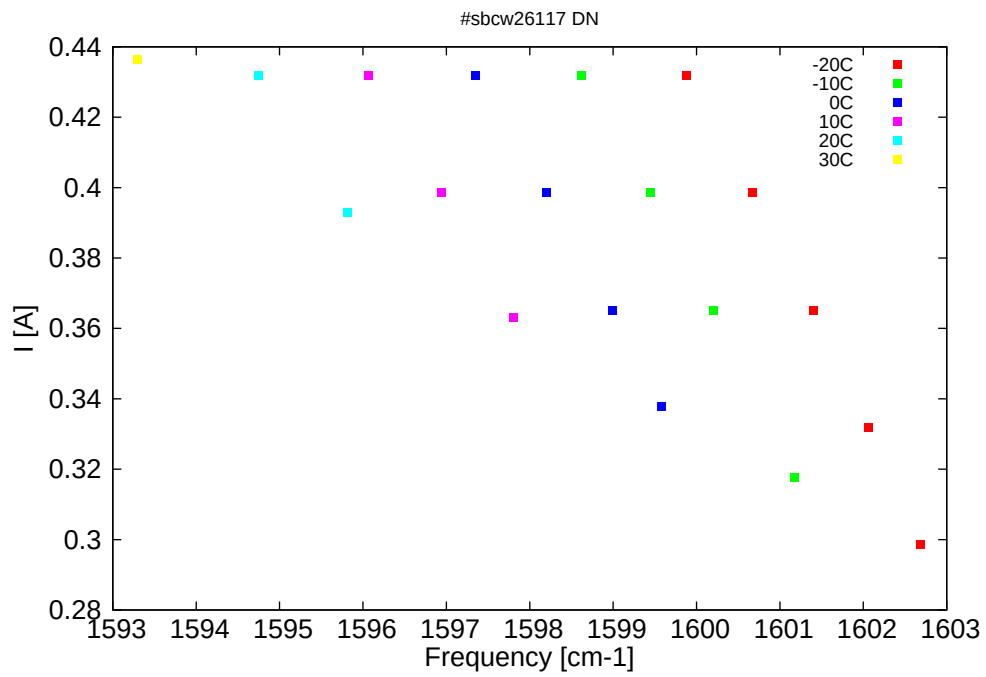


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
6239.5	1602.7	0.4	-20	9.46	0.299
6241.9	1602.1	14.7	-20	9.69	0.332
6244.5	1601.4	27.6	-20	9.93	0.365
6247.4	1600.7	37.5	-20	10.17	0.399
6250.5	1599.9	43.7	-20	10.45	0.432
6245.4	1601.2	0.2	-10	9.54	0.318
6249.2	1600.2	17.2	-10	9.88	0.365
6252.2	1599.4	26.2	-10	10.13	0.399
6255.4	1598.6	31.8	-10	10.4	0.432
6251.7	1599.6	0.1	0	9.62	0.338
6254	1599	8.2	0	9.83	0.365
6257	1598.2	16.6	0	10.08	0.399
6260.4	1597.4	21.6	0	10.36	0.432
6258.6	1597.8	0.3	10	9.76	0.363
6262	1596.9	8.2	10	10.04	0.399
6265.4	1596.1	12.9	10	10.32	0.432
6266.4	1595.8	0.2	20	9.95	0.393
6270.6	1594.8	5.6	20	10.28	0.432
6276.3	1593.3	0.1	30	10.27	0.436

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

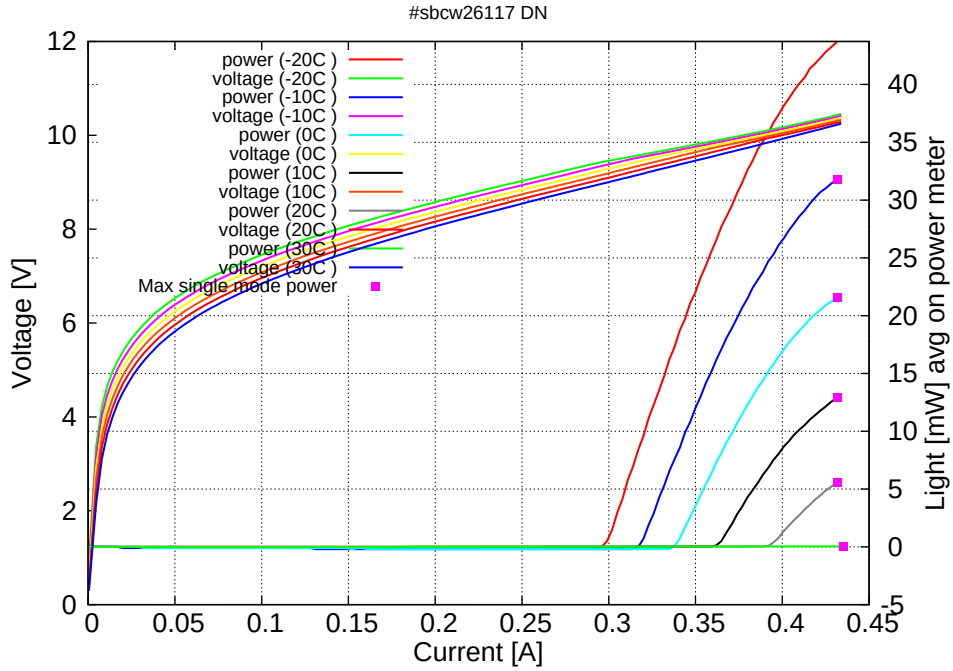


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.29A$ / $V_{th}=9.4V$ (2-wires measurements). Maximum operation current: 0.435A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

