

Datasheet for #sbcw26112 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 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.

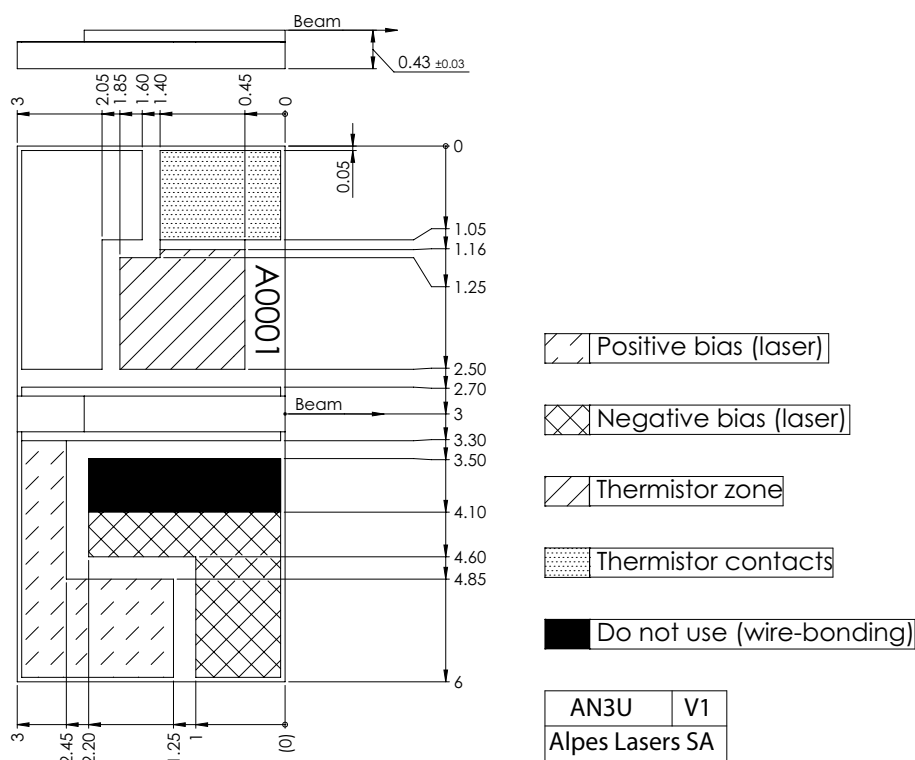


Figure 1: Mechanical and electrical interface for #sbcw26112 DN (please note that AlN submount numbering is A0VA6)

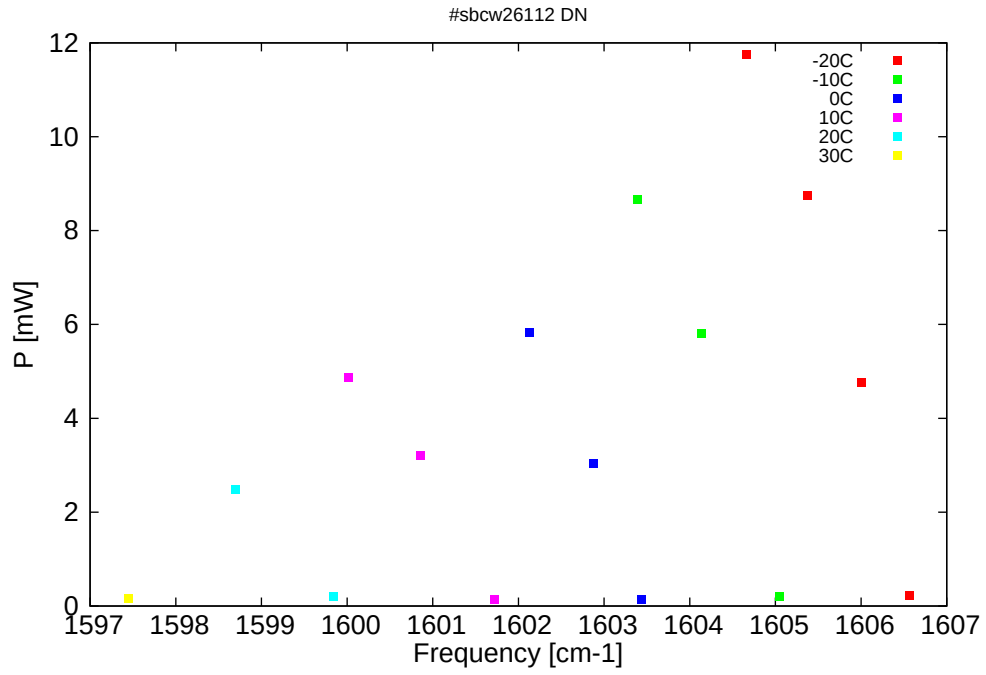


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

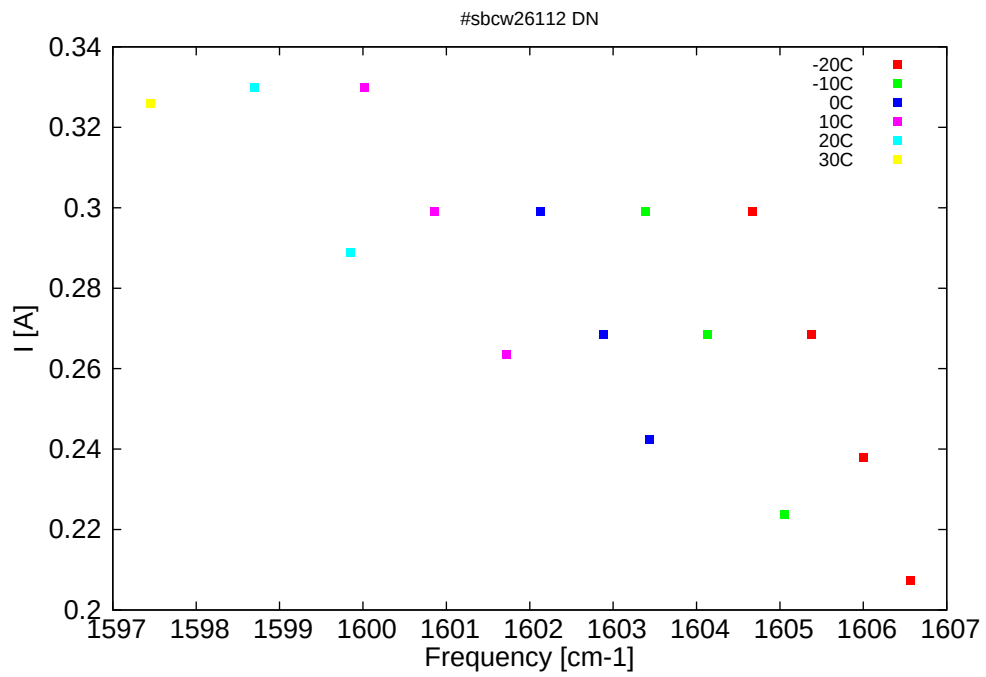


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
6224.5	1606.6	0.2	-20	9.1	0.207
6226.6	1606	4.8	-20	9.39	0.238
6229.1	1605.4	8.7	-20	9.69	0.269
6231.8	1604.7	11.8	-20	10.02	0.299
6230.3	1605.1	0.2	-10	9.17	0.224
6233.9	1604.1	5.8	-10	9.61	0.269
6236.8	1603.4	8.7	-10	9.95	0.299
6236.6	1603.4	0.1	0	9.26	0.243
6238.8	1602.9	3	0	9.52	0.269
6241.7	1602.1	5.8	0	9.84	0.299
6243.3	1601.7	0.2	10	9.4	0.263
6246.6	1600.9	3.2	10	9.78	0.299
6249.9	1600	4.9	10	10.13	0.33
6250.6	1599.8	0.2	20	9.62	0.289
6255.1	1598.7	2.5	20	10.09	0.33
6260	1597.5	0.2	30	10.01	0.326

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

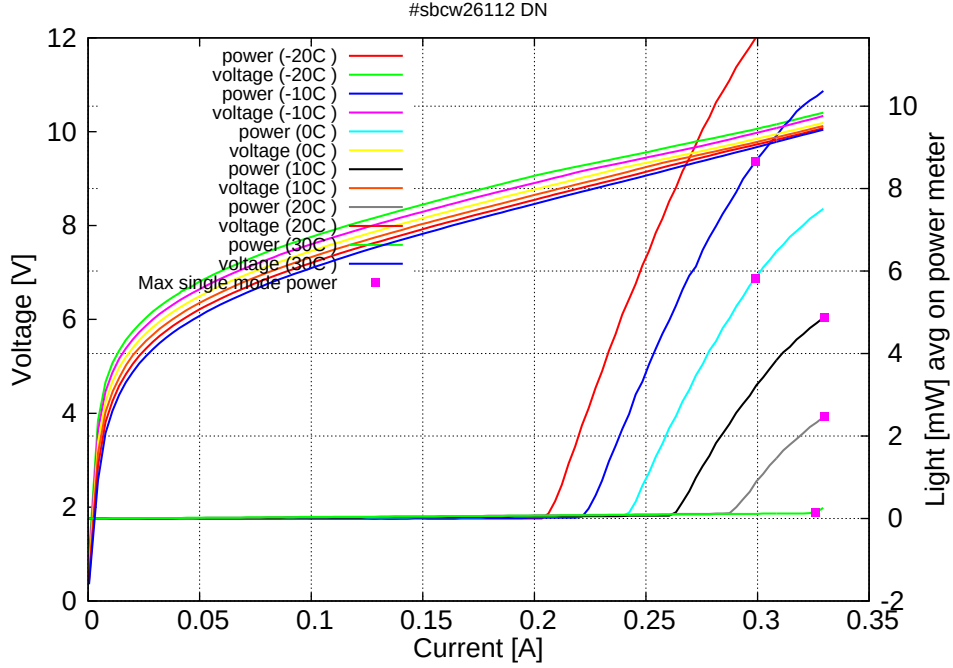


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.20A$ / $V_{th}=9.0V$ (2-wires measurements). Maximum operation current: 0.3A between -20C and 0C, 0.330A between 10C and 30C.

Figure 3: spectra at different temperatures for various DC currents

