

Datasheet for #sbcw26636 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.

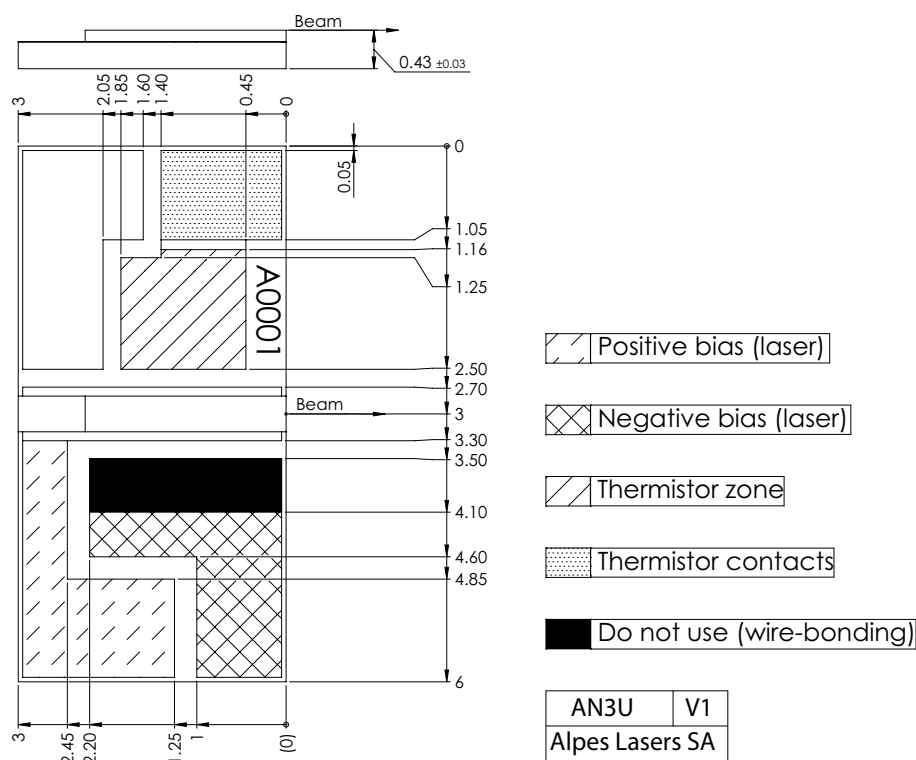


Figure 1: Mechanical and electrical interface for #sbcw26636 DN (please note that AlN submount numbering is A0U46)

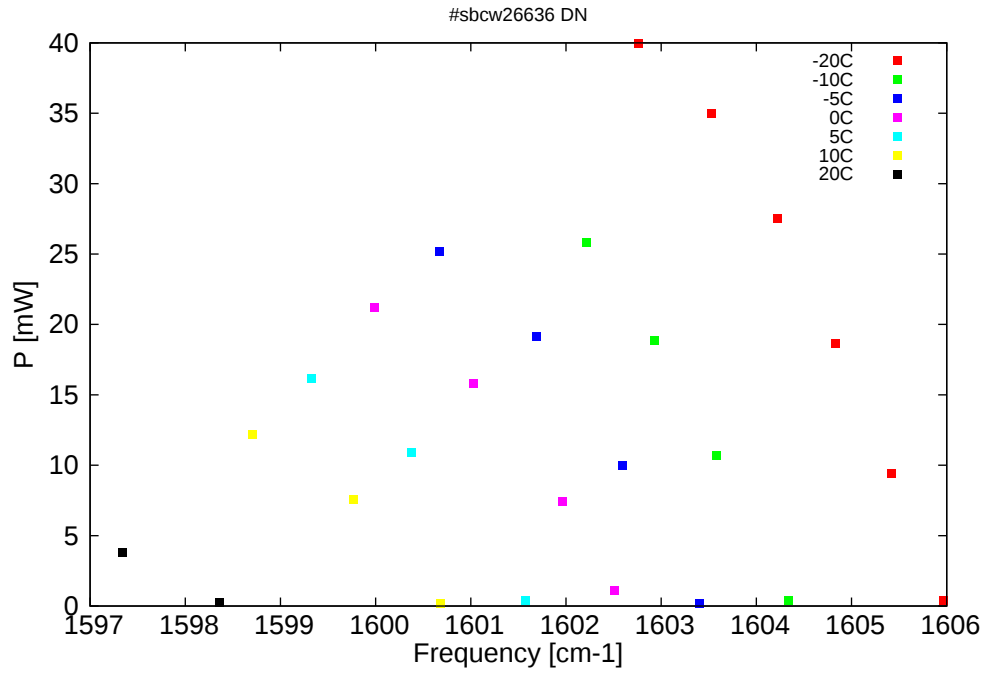


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

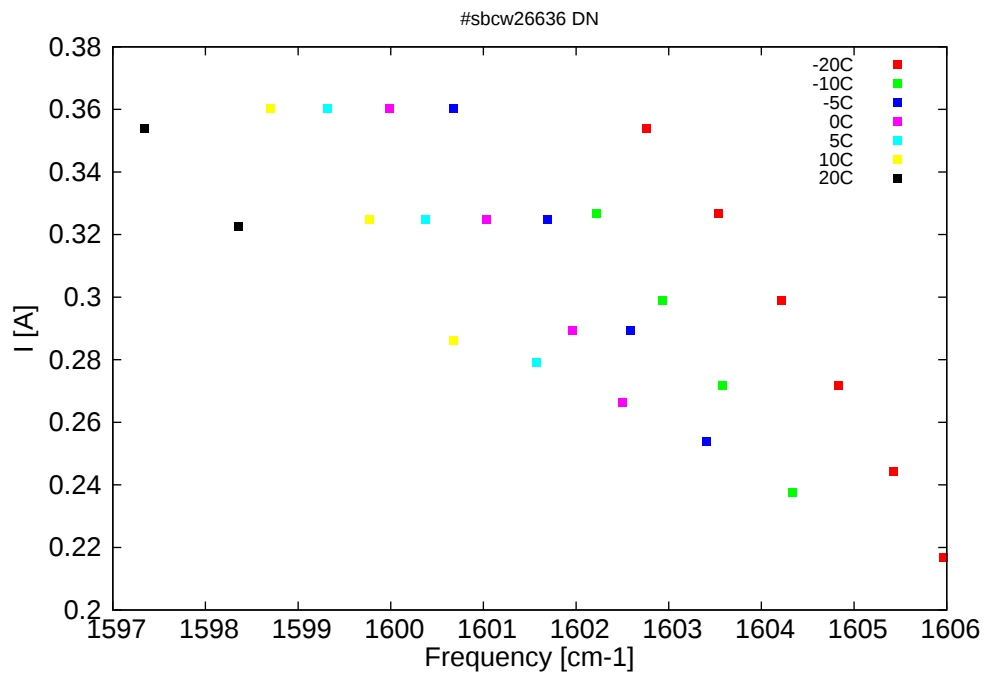


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
6226.8	1606	0.4	-20	9.21	0.217
6228.9	1605.4	9.4	-20	9.46	0.244
6231.2	1604.8	18.7	-20	9.71	0.272
6233.6	1604.2	27.5	-20	9.97	0.299
6236.2	1603.5	35	-20	10.24	0.327
6239.2	1602.8	39.9	-20	10.55	0.354
6233.1	1604.3	0.4	-10	9.34	0.237
6236	1603.6	10.7	-10	9.65	0.272
6238.6	1602.9	18.9	-10	9.92	0.299
6241.3	1602.2	25.9	-10	10.2	0.327
6236.7	1603.4	0.2	-5	9.42	0.254
6239.9	1602.6	10	-5	9.75	0.289
6243.4	1601.7	19.1	-5	10.1	0.325
6247.4	1600.7	25.2	-5	10.48	0.36
6240.2	1602.5	1.1	0	9.51	0.266
6242.3	1602	7.4	0	9.73	0.289
6246	1601	15.8	0	10.08	0.325
6250	1600	21.2	0	10.45	0.36
6243.9	1601.6	0.4	5	9.59	0.279
6248.5	1600.4	10.9	5	10.05	0.325
6252.6	1599.3	16.2	5	10.43	0.36
6247.4	1600.7	0.2	10	9.69	0.286
6250.9	1599.8	7.5	10	9.98	0.325
6255.1	1598.7	12.2	10	10.36	0.36
6256.4	1598.4	0.3	20	10.01	0.323
6260.4	1597.3	3.8	20	10.36	0.354

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

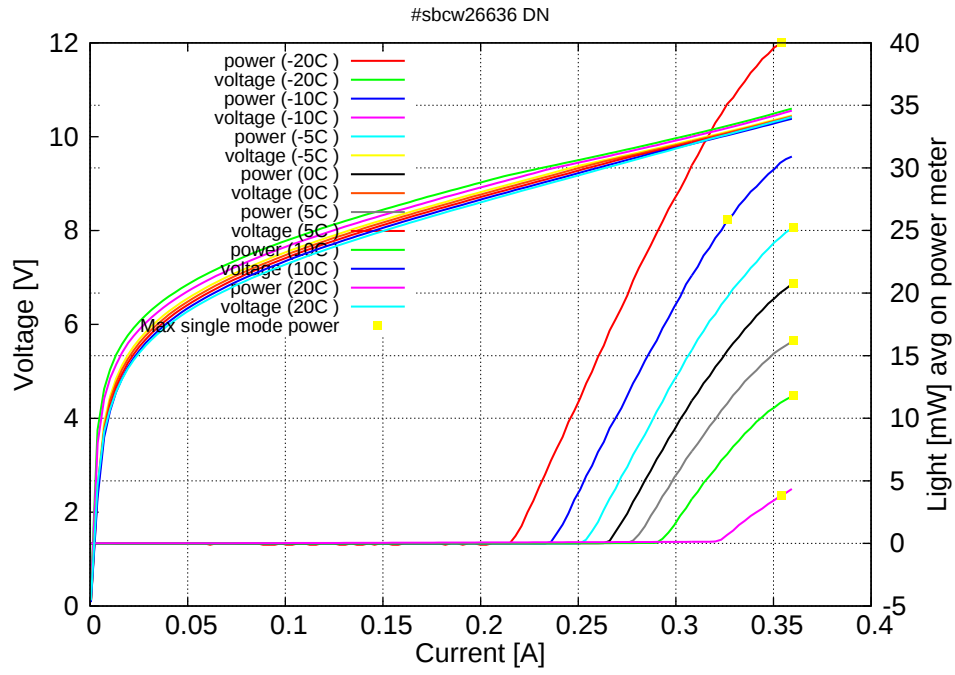


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.21A$ / $V_{th}=9.2V$ (2-wires measurements). Maximum operation current: 0.36A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

