

Datasheet for #sbcw26633 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.

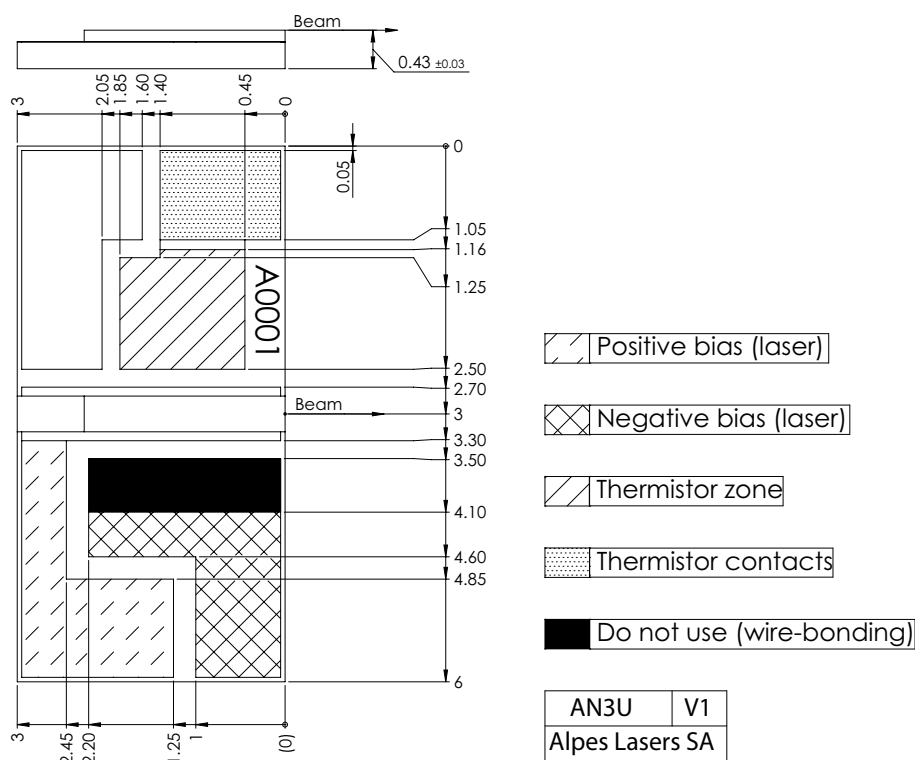


Figure 1: Mechanical and electrical interface for #sbcw26633 DN (please note that AlN submount numbering is A0VKK)

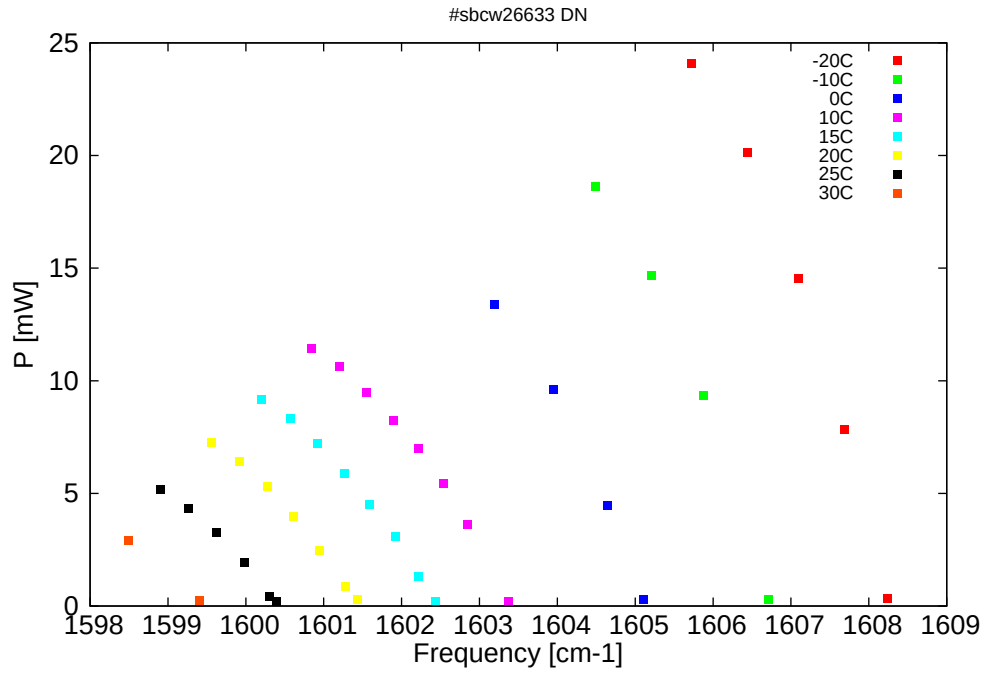


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

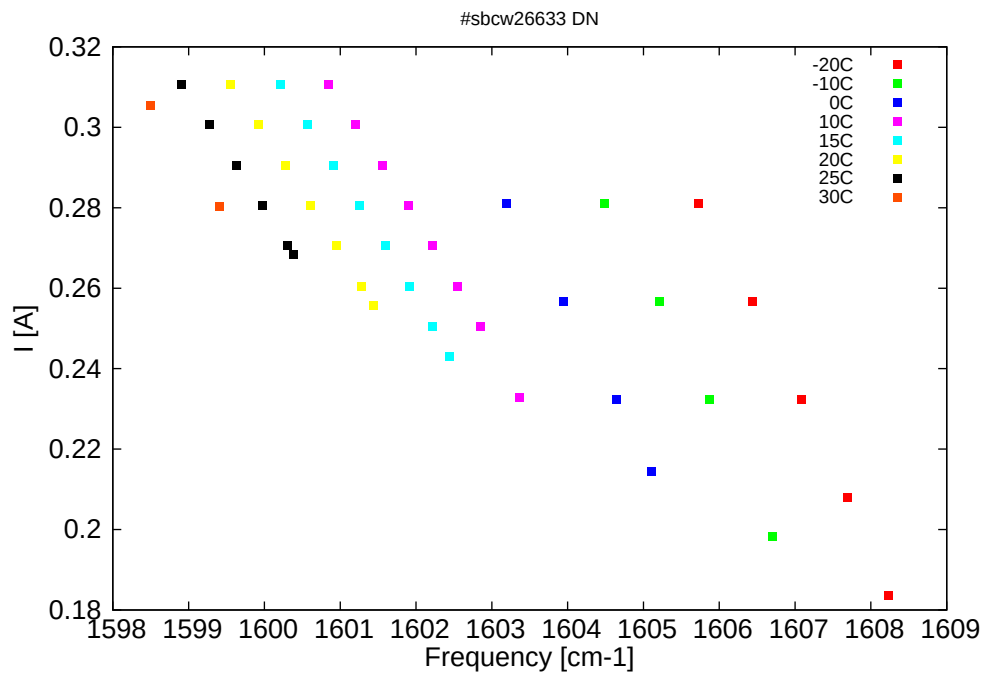


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
6218	1608.2	0.3	-20	9.63	0.184
6220.1	1607.7	7.8	-20	9.93	0.208
6222.4	1607.1	14.5	-20	10.23	0.232
6224.9	1606.4	20.1	-20	10.55	0.257
6227.7	1605.7	24.1	-20	10.89	0.281
6223.9	1606.7	0.3	-10	9.73	0.198
6227.1	1605.9	9.3	-10	10.15	0.232
6229.7	1605.2	14.7	-10	10.47	0.257
6232.5	1604.5	18.6	-10	10.8	0.281
6230.1	1605.1	0.3	0	9.85	0.215
6231.9	1604.6	4.4	0	10.07	0.232
6234.6	1604	9.6	0	10.39	0.257
6237.5	1603.2	13.4	0	10.73	0.281
6236.9	1603.4	0.2	10	10.05	0.233
6238.9	1602.8	3.6	10	10.28	0.251
6240.1	1602.5	5.5	10	10.42	0.261
6241.3	1602.2	7	10	10.56	0.271
6242.6	1601.9	8.2	10	10.69	0.281
6243.9	1601.6	9.5	10	10.83	0.291
6245.3	1601.2	10.6	10	10.97	0.301
6246.7	1600.8	11.4	10	11.11	0.311
6240.5	1602.4	0.2	15	10.15	0.243
6241.3	1602.2	1.3	15	10.24	0.251
6242.5	1601.9	3.1	15	10.38	0.261
6243.8	1601.6	4.5	15	10.52	0.271
6245.1	1601.3	5.9	15	10.65	0.281
6246.4	1600.9	7.2	15	10.79	0.291
6247.8	1600.6	8.3	15	10.93	0.301
6249.2	1600.2	9.2	15	11.07	0.311
6244.4	1601.4	0.3	20	10.28	0.256
6245	1601.3	0.9	20	10.34	0.261
6246.3	1601	2.4	20	10.47	0.271
6247.6	1600.6	4	20	10.61	0.281
6248.9	1600.3	5.3	20	10.74	0.291
6250.3	1599.9	6.4	20	10.88	0.301
6251.7	1599.6	7.2	20	11.02	0.311
6248.5	1600.4	0.2	25	10.4	0.268
6248.8	1600.3	0.4	25	10.43	0.271
6250.1	1600	2	25	10.57	0.281
6251.5	1599.6	3.3	25	10.7	0.291
6252.9	1599.3	4.3	25	10.84	0.301
6254.3	1598.9	5.2	25	10.97	0.311
6252.3	1599.4	0.2	30	10.47	0.28
6255.9	1598.5	2.9	30	10.81	0.306

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

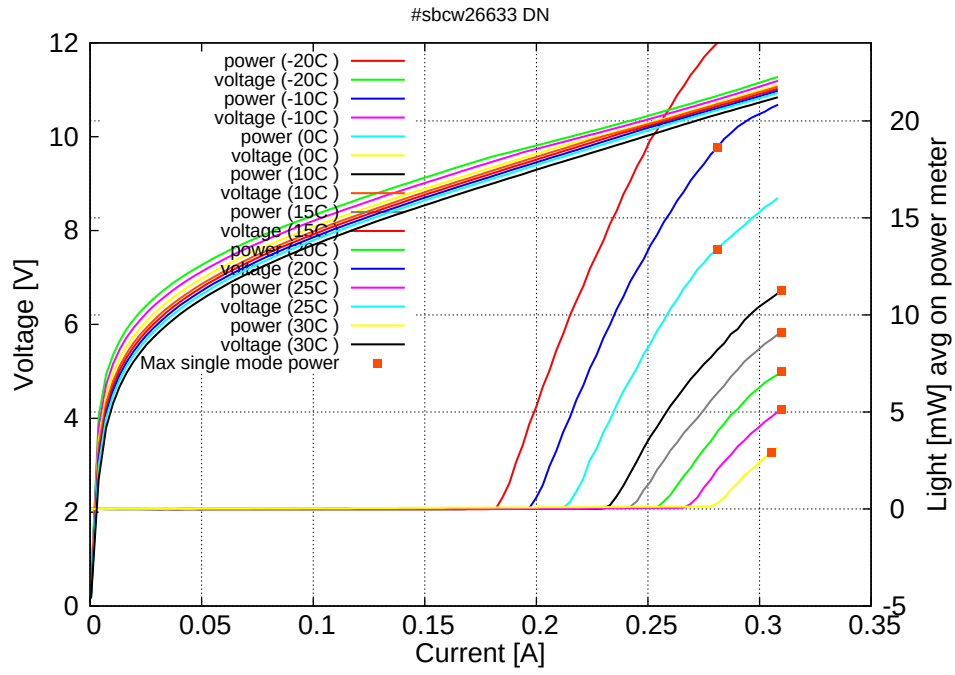


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.18A$ / $V_{th}=9.6V$ (2-wires measurements). Maximum operation current: 0.28A between -20C and 0C, 0.31A between 10C and 30C.

