

Datasheet for #sbcw26663 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 #sbcw26663 DN

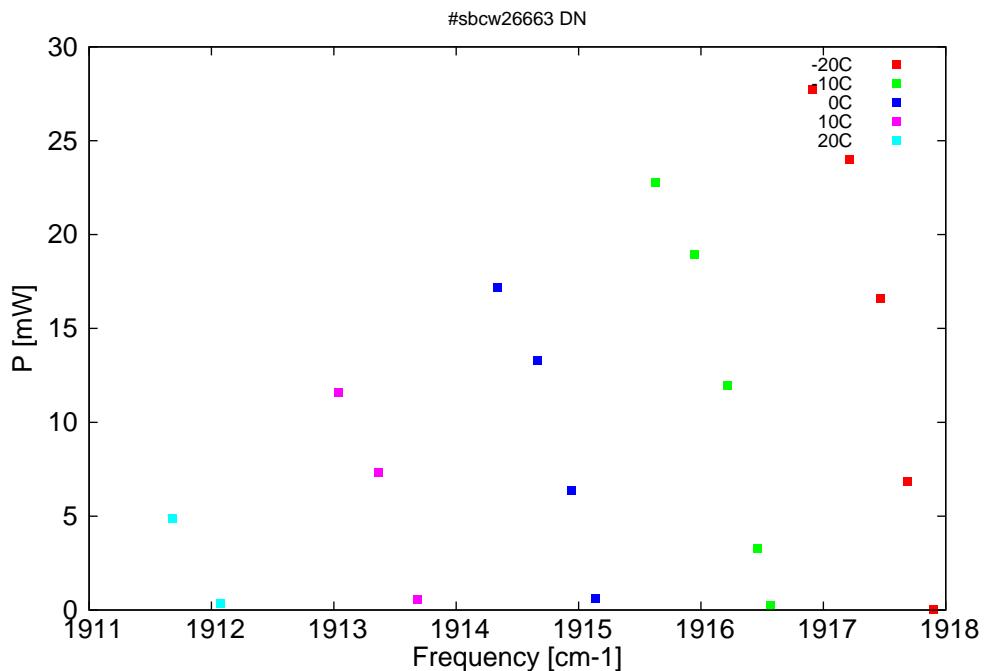


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

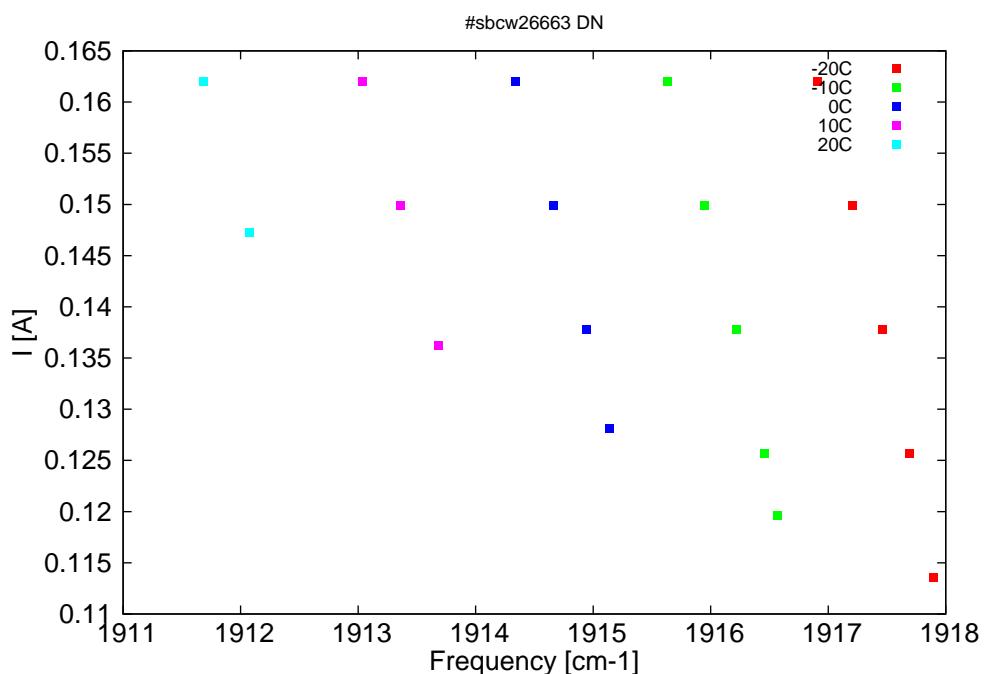


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm $^{-1}$]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
5214	1917.9	0	-20	8.41	0.114
5214.6	1917.7	6.9	-20	8.62	0.126
5215.2	1917.5	16.6	-20	8.85	0.138
5215.9	1917.2	24	-20	9.11	0.15
5216.7	1916.9	27.7	-20	9.41	0.162
5217.7	1916.6	0.3	-10	8.48	0.12
5218	1916.5	3.3	-10	8.59	0.126
5218.6	1916.2	12	-10	8.82	0.138
5219.4	1915.9	18.9	-10	9.08	0.15
5220.2	1915.6	22.8	-10	9.37	0.162
5221.5	1915.1	0.6	0	8.61	0.128
5222.1	1914.9	6.4	0	8.79	0.138
5222.8	1914.7	13.3	0	9.05	0.15
5223.7	1914.3	17.2	0	9.34	0.162
5225.5	1913.7	0.6	10	8.73	0.136
5226.4	1913.4	7.4	10	9.02	0.15
5227.3	1913	11.6	10	9.3	0.162
5229.9	1912.1	0.4	20	8.93	0.147
5231	1911.7	4.9	20	9.26	0.162

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

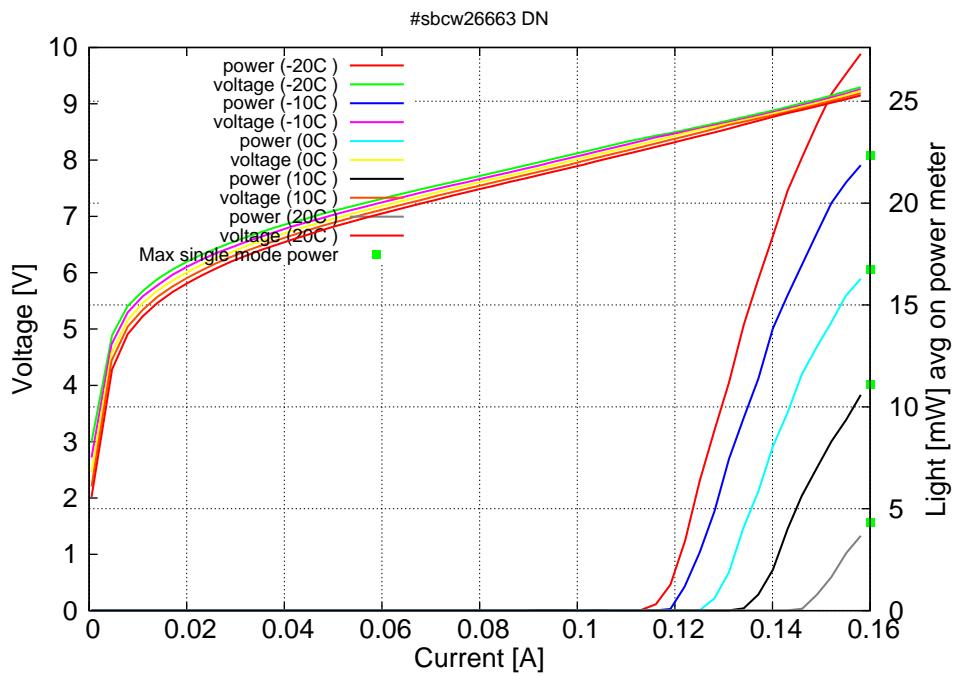


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum snglemode emitted power)

Note: at -20C: $I_{th}=0.12A$ / $V_{th}=8.4V$ (2-wires measurements). Maximum operation current: 0.16A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

