

**Datasheet for #sbcw3347 DN**

Recommendations:

Please read the starter kit user manual, if available, and have a look at the FAQ at <http://www.alpeslasers.ch/alfaqa.pdf>

**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 use with a power-supply ILX Lightwave LDX-3232 or equivalent.

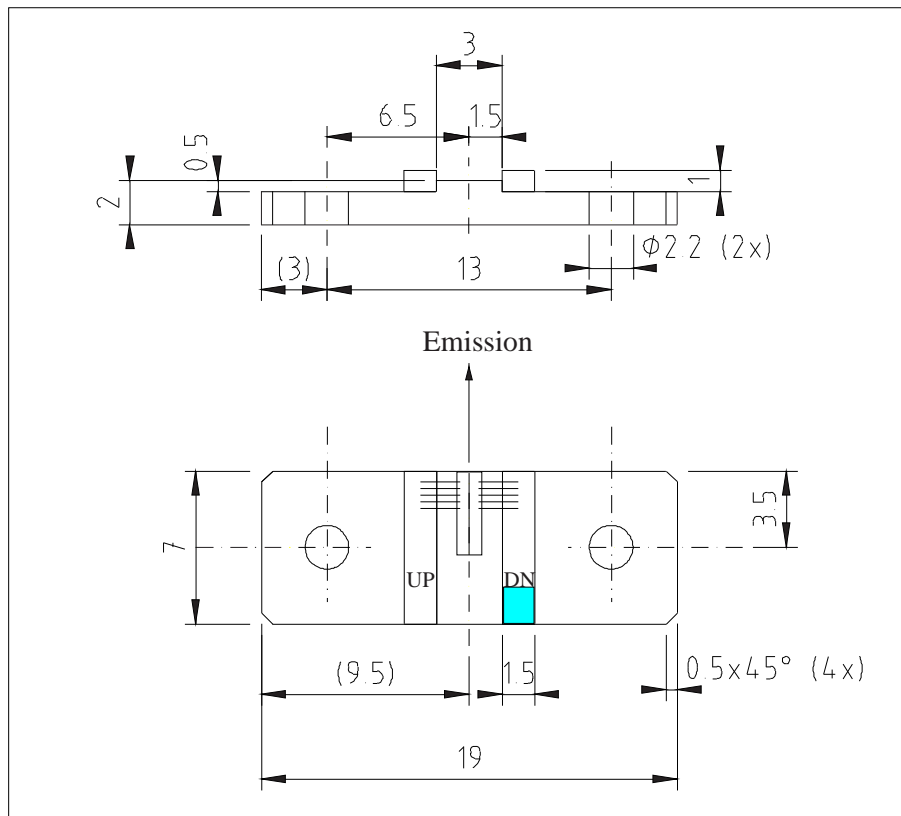


Figure 1: Support mounting for #sbcw3347 DN (please note that the laser is connected to the DN pad drawn in blue)

# Performances of the final laser: HR coated on back-facet

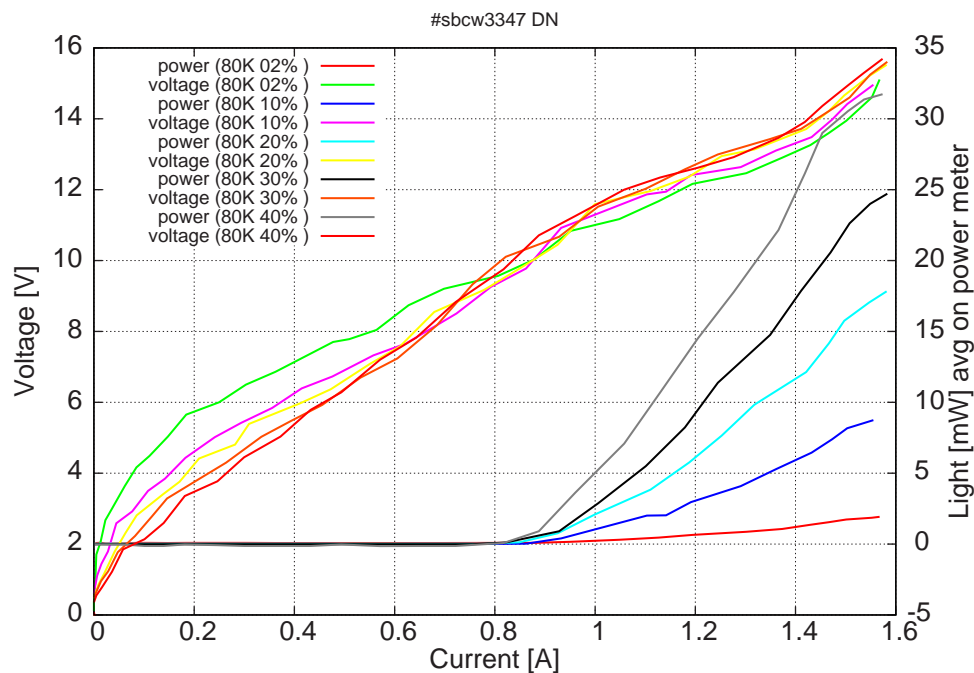


Figure 2: peak voltage and average power vs peak current at 80K for various duty-cycle (100ns pulses on the laser) for the HR coated laser (the solid squares indicate the maximum singlemode emitted power)

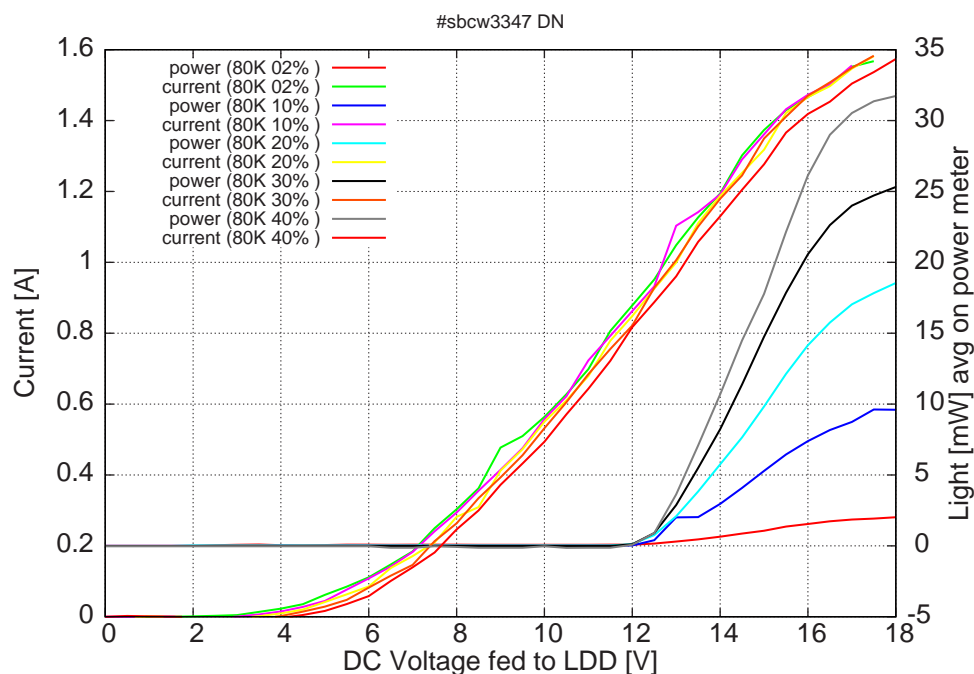


Figure 3: peak current and average power vs LDD voltage at 80K for various duty-cycle (100ns pulses on the laser) for the HR coated laser (the solid squares indicate the maximum singlemode emitted power)

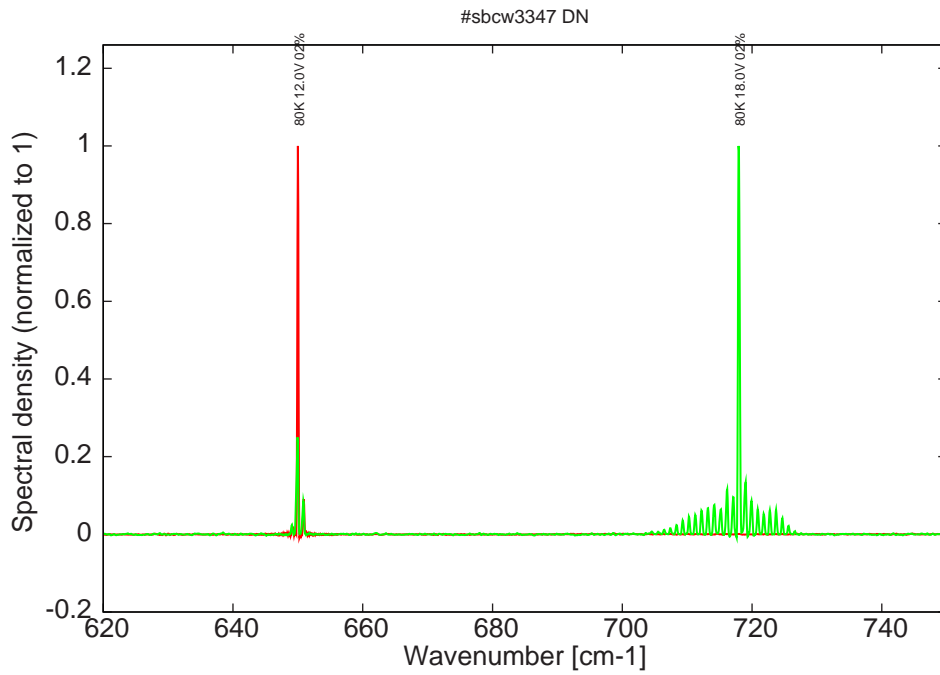


Figure 4: spectra at 80K at 2% duty-cycle for various LDD voltages for the HR coated laser

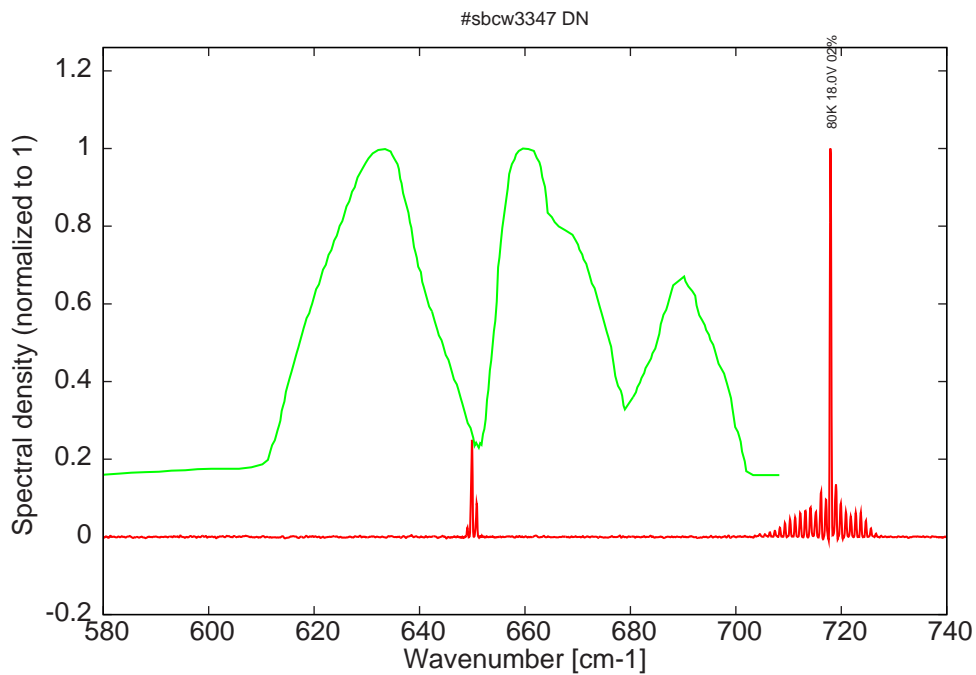


Figure 5: spectrum at 80K at 2% duty-cycle for the HR coated laser (red) with the two-phonon absorption from Koteles and Datars (green)

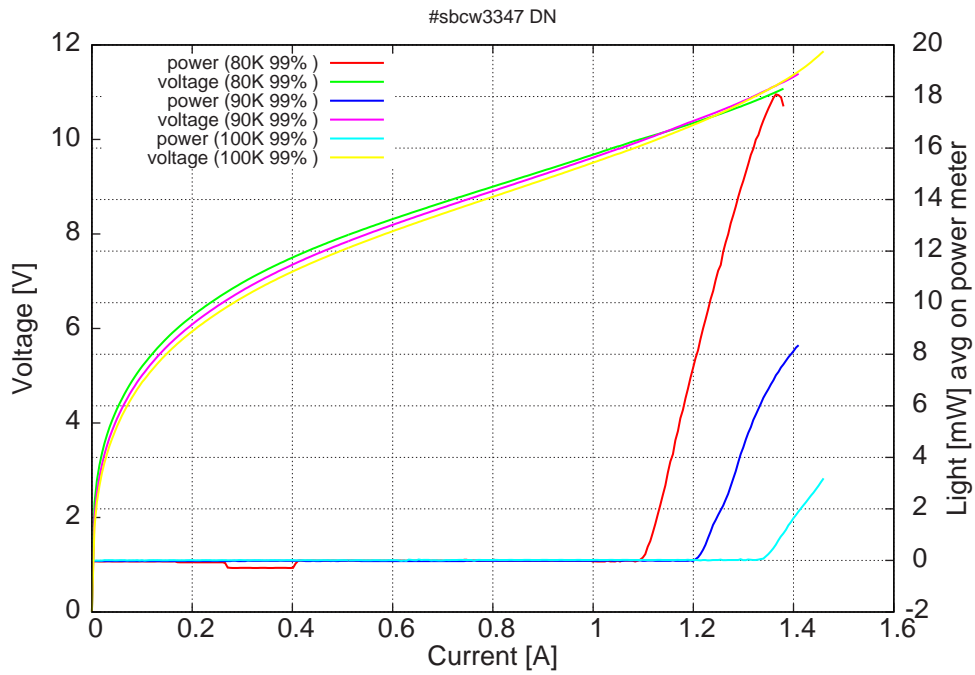


Figure 6: voltage and avg power vs current in continuous-wave operation for the HR coated laser (the solid squares indicate the maximum singlemode emitted power)

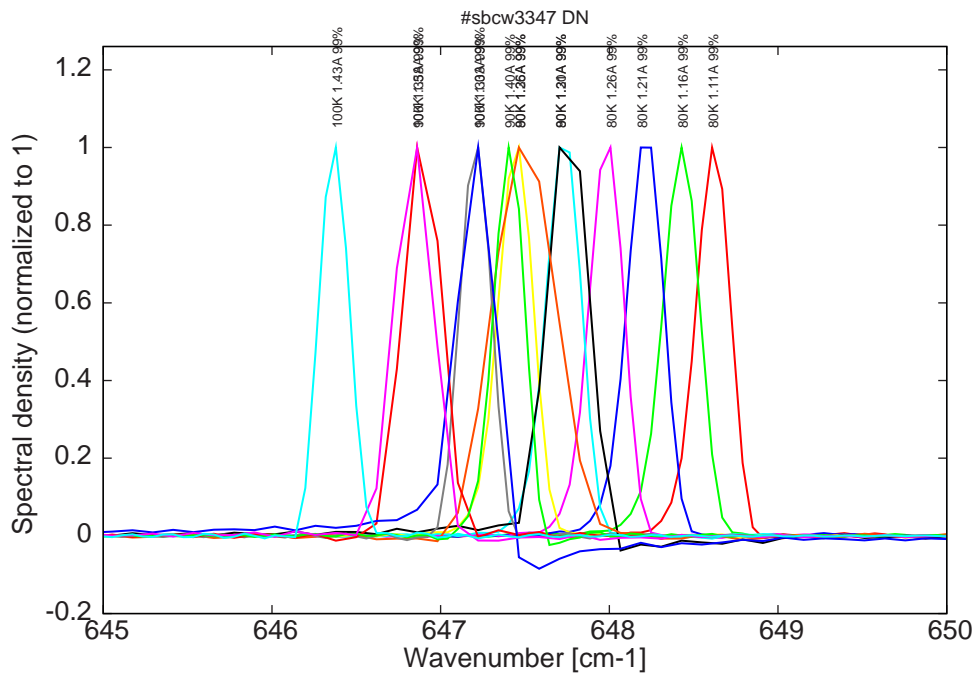


Figure 7: spectra between 80K and 100K in continuous wave for the HR coated laser