Typical geometrical sizes of the Broad Area Diode Laser chip are 1000µm x 500µm x 200µm (length x width x height). The typical emitter width is 100µm. The laser chip is grown by MOVPE of compound semiconductor material. The optical gain is provided by double heterostructure which include several Quantum Wells for electronic confinement. The surfaces of the laser chip act as cavity mirrors due to the difference of the refractive index of the laser material and the surrounding air. The rear facet of the laser chip is provided with an high reflective coating. The front facet of the laser chip is provided with a class A anti-reflection coating for directing the output power to the front facet of the laser chip. The broad area laser chips are mounted as chip on carrier. High power devices are available with up to 0.5W at 740nm and 2W at 980nm. These diode lasers are longitudinal and spatial multimode.