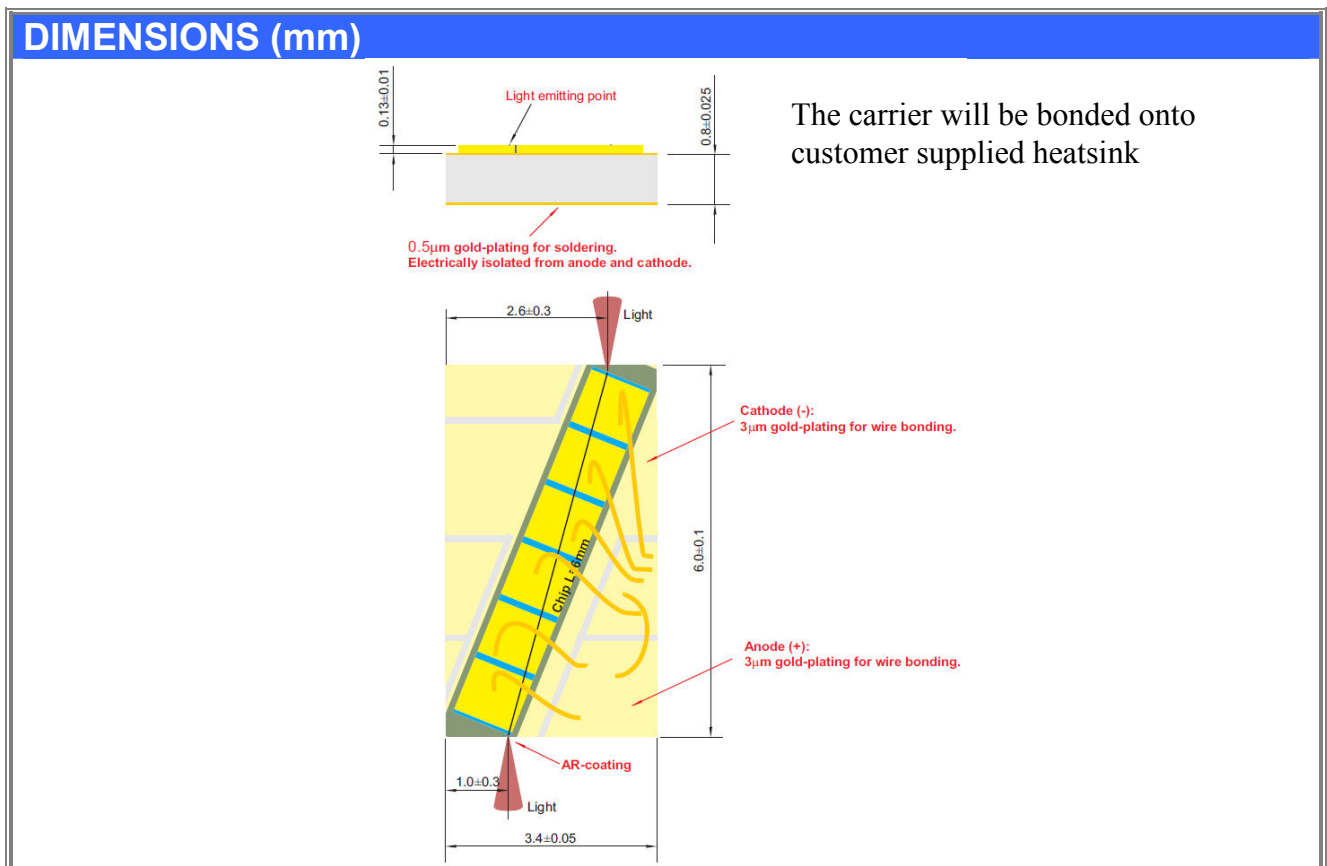


GC-1120-20-300mW High Power Gain Chip – 300mW @1120nm	
	Features: <ul style="list-style-type: none"> • Unique wavelength range • Optimized for wavelength locked operation in external cavity system • Proprietary mirror coating technology enabling long life-time
	<ul style="list-style-type: none"> • AlN high thermal conductive carrier • High reliable Au/Sn-bonding technology
Target specification for engineering samples	DATE: 3 rd March 2010

SPECIFICATIONS				
Test conditions: CW cooled operation at temperature 25°C				
Parameters	Min.	Typ.	Max.	Unit
Expected optical output power at the central part of the tuning range in external cavity (depending on external feedback)	300			mW
Central position of wavelength tuning range	1110	1120	1130	nm
Wavelength tuning range	20			nm
Reflectivity of Slanted Stripe Facets (AR-coated)		10 ⁻⁶	10 ⁻⁴	
Operating current		800	1100	mA
Forward voltage		1.5	1.7	V
Divergence parallel to p-n junction (FWHM)	5	7	9	Deg.
Divergence perpendicular to p-n junction (FWHM)	33	35	37	Deg.



ABSOLUTE MAXIMUM RATINGS			
Parameters	Min	Max	Unit
Diode reverse voltage		1	V
Forward current		1300	mA
Storage temperature range (in original hermetically sealed package)	5	80	°C
Heatsink operating temperature range	above dew point	50	°C

SAFETY AND OPERATING INSTRUCTIONS


The laser light emitted from this Device is invisible and will be harmful to the human eye. Avoid looking directly into the fiber output or into the collimated beam along its optical axis when the device is in operation. Proper laser safety eyewear must be worn during operation.

Absolute Maximum Ratings may be applied to the Device for short period of time only. Exposure to maximum ratings for extended period of time or exposure above one or more max ratings may cause damage or affect the reliability of the Device.

Operating the product outside of its maximum ratings may cause device failure or a safety hazard. Power supplies used with the Device must be employed such that the maximum peak optical power cannot be exceeded. A proper heatsink for the Device on thermal radiator is required, sufficient heat dissipation and thermal conductance to the heatsink must be ensured.

The Device is an Open-Heatsink Diode Laser; it may be operated in cleanroom atmosphere or dust-protected housing only. Operating temperature and relative humidity must be controlled to avoid water condensation on the laser facets. Any contamination or contact of the laser facet must be avoided

ESD PROTECTION – Electrostatic discharge is the primary cause of unexpected product failure. Take extreme precaution to prevent ESD. Use wrist straps, grounded work surfaces and rigorous antistatic techniques when handling the product.



LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION
 CLASS 4 LASER PRODUCT

CAUTION
 STATIC SENSITIVE DEVICE
 OBSERVE PRECAUTIONS

DANGER

VISIBLE AND/OR INVISIBLE LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION

DIODE LASER
 MAX POWER 1W
 WAVELENGTH 1000 - 1400 nm
 CLASS IV LASER PRODUCT