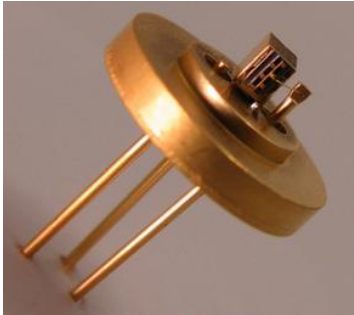


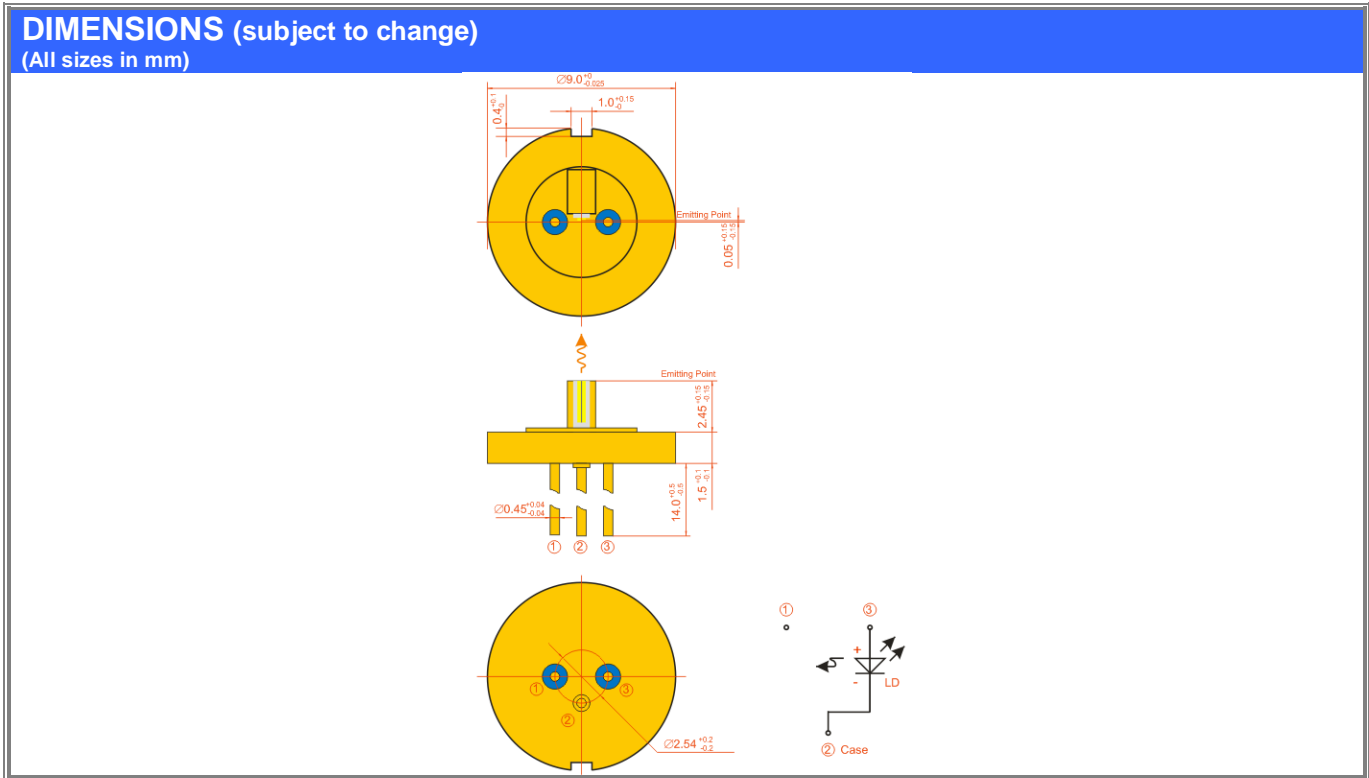
GC-1120-TO-140	
High Power Gain Chip for external cavity operation	
	Features: <ul style="list-style-type: none"> • GaAs based single transverse mode gain chip • High quality AR coating on the output facet • Passed 100 hours burn-in test at operating current and 40°C
	<ul style="list-style-type: none"> • Industry standard 9mm TO-can package (supplied without cap)
	Application: <ul style="list-style-type: none"> • External cavity tunable laser
Specification	DATE: 11 th March 2010

SPECIFICATIONS				
Test conditions: CW operation at 25°C heatsink temperature				
Parameters	Min	Typ	Max	Unit
Optical output power at the central part of the tuning range (depending on external feedback)	140			mW
Central wavelength of tunability range	1110	1120	1130	nm
Tunability range	25			nm
Operating current (I_{op})		300	400	mA
Reflectivity of back facet (HR-coated)	99			%
Reflectivity of front facet (angled and AR-coated)		10^{-4}	10^{-2}	%
Operating voltage		1.6	1.9	V
Fast axis beam divergence of self lasing (FWHM)		33	37	deg.
Slow axis beam divergence of self lasing (FWHM)		6	9	deg.
Power drop during 100 hours burn-in test ¹			1	%

¹ Burn-in test conditions: CW operation current (I_{op}), heatsink temperature 40°C

ABSOLUTE MAXIMUM RATINGS			
Parameters	Min	Max	Unit
Diode reverse voltage		1	V
Forward current		500	mA
Storage temperature range (in original hermetically sealed package)	5	80	°C
Case operating temperature range	20	40	°C

NOTE: Innolume product specifications are subject to change without notice.



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 with 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.

