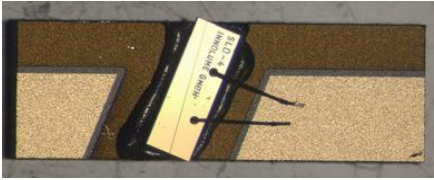
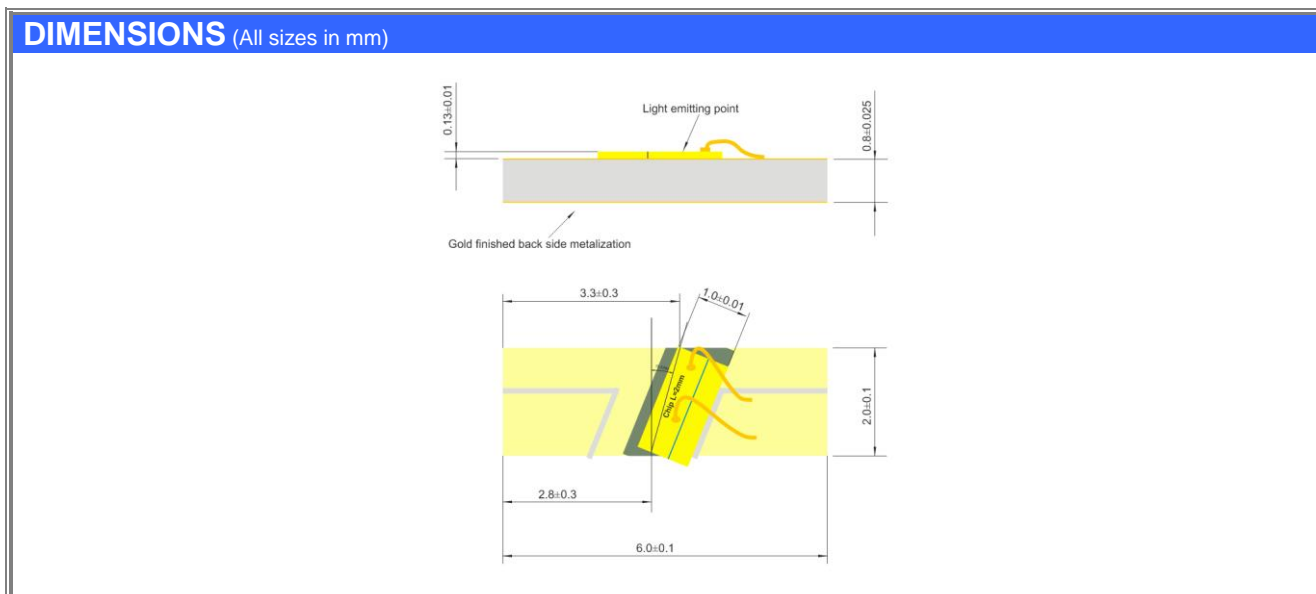


GC-1060-100	
Broad Band Tunability Range Gain Chip on Carrier	
	<p>Features:</p> <ul style="list-style-type: none"> • InAs Quantum Dot based single transverse mode gain chip • Broad tuning range • Optimized for wavelength locked operation in external cavity system • Proprietary mirror coating technology enabling long life-time • CW or pulse (down to 2ns pulse width) operation • Industry standard 9mm TO-can package (supplied without cap) • High reliable Au/Sn bonding technology <p>Application:</p> <ul style="list-style-type: none"> • External cavity tunable laser <p style="text-align: right;">Chip design category: Type D</p>
<p>Specification DATE: 2th November 2010</p>	

SPECIFICATIONS				
Test conditions: CW cooled operation at temperature 25°C,				
Parameters	Min.	Typ.	Max.	Unit
ASE central wavelength	1010	1020	1030	nm
Wavelength tuning range (output power >20 mW)	100			nm
Recommended operating current	500	600	700	mA
Forward voltage			1.9	V
Output power in grating stabilized at 1060nm external cavity configuration (at operating current)		200		mW
ASE slow axis beam divergence (FWHM)	8	11	13	Deg.
ASE fast axis beam divergence (FWHM)	30	33	35	Deg.

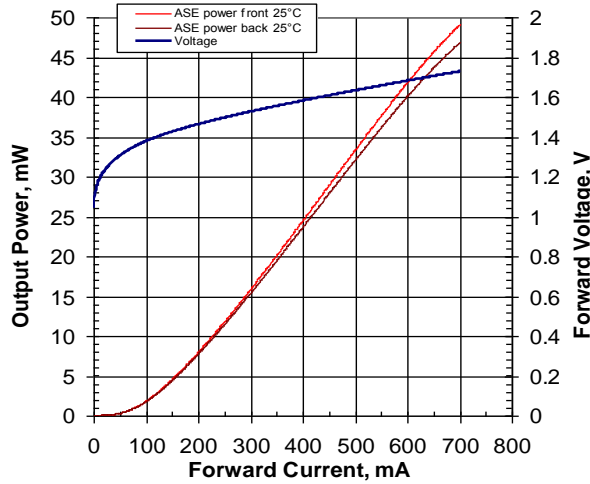
ABSOLUTE MAXIMUM RATINGS			
Parameters	Min	Max	Unit
Diode reverse voltage		1	V
Forward current		900	mA
Storage temperature range (in original hermetically sealed package)	5	80	°C
Case operating temperature range	20	40	°C



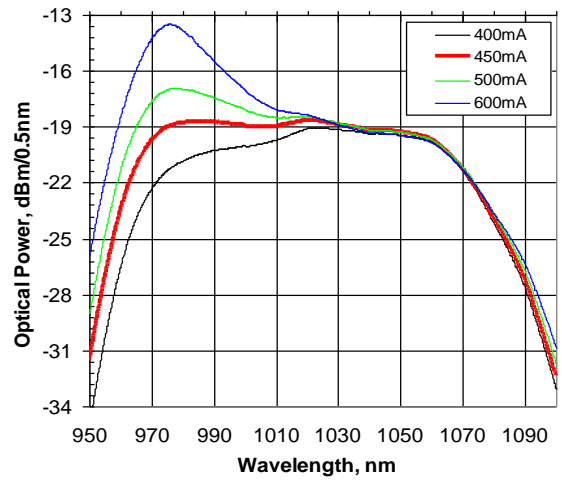
TYPICAL PERFORMANCE

Test condition: CW cooled operation at 25°C

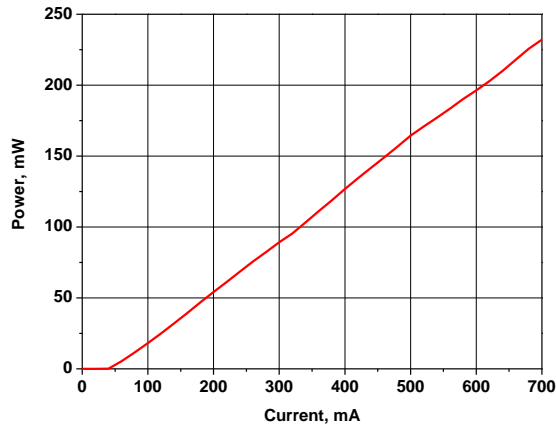
ASE Light-Current-Voltage Characteristics



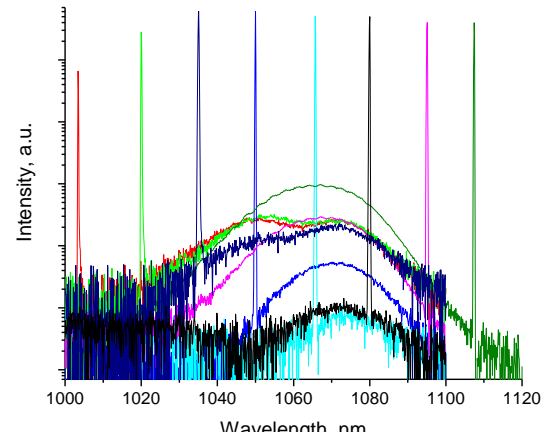
ASE Spectra Characteristics



Light-Current Characteristic in grating stabilized at 1060nm external cavity setup



Spectra in external cavity setup with different positions of grating



SAFETY AND OPERATING INSTRUCTIONS

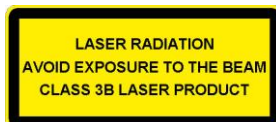
The laser light emitted from this Gain Chip is invisible and will be harmful to the human eye. Avoid looking directly on the Gain Chip facet or into the collimated beam along its optical axis when the device is in operation. Proper laser safety eyewear must be worn during operation.

Absolute Maximum Ratings may be applied to the Gain Chip 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 Gain Chip outside of its maximum ratings may cause device failure or a safety hazard. Power supplies used with the component must be employed such that the maximum peak optical power cannot be exceeded. A proper heatsink for the Gain Chip is required.

The Device is an Open-Heatsink Diode Gain Chip; 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 laser diode failure. Take extreme precaution to prevent ESD. Use wrist straps, grounded work surfaces and rigorous antistatic techniques when handling laser diodes.



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