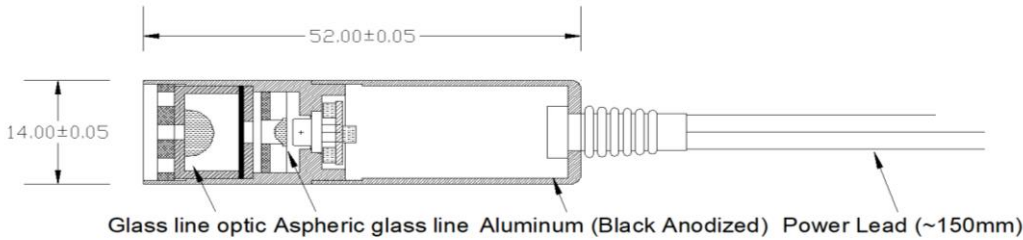


DIODE LASER MODULE

LAL serial - Fine Line Generator

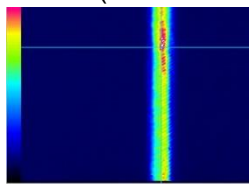


Feature -

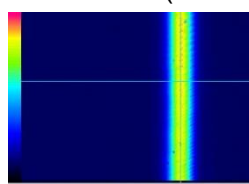
- Auto optical output power control
- Low operating power consumption
- Polarity reverse protected
- High temperature operation is optional
- Focus adjustable by user
- Optical output assigned by customer
- Saving cost diode (T3 type) is available
- Case Material : Black Anodized (Aluminum)
- Line width 1mm between 500mm distance
- Collimating lens / Line optic : Cylinder Optics
- Operation Voltage : 3V/5V/12V/24V

General Specification -

Max. Optical output Power	<i>See available fan angle reference</i>
Optical output Power	Within range +0 to -10% of customer assigned power
Wavelength	<i>See available laser diode reference</i>
Diode Power	<i>See available laser diode reference</i>
Operation Voltage	3V/5V/12V/24V DC +-10%
Operation Temperature	-10 °C ~ 40°C
Line Width	see photo
Collimating lens	Aspherical plastic Lens
Line Optic	Cylinder glass lens
Line width	1mm between 500mm distance
Case Material	Black Anodized (Aluminum)
MTTF (Mean Time To Failure)	10000 hrs (for standard type), 3000 hrs (for T3 type)



	Horizontal		Vert
	Beam	Gaussian	Beam
Centroid (m)	3509.01		3688
Beam Peak (m)	3546.00	3509.01	3688.79
Width (m) (77.5%)	236.88	234.64	375.25
Width (m) (13.8%)	636.71	655.70	2319.70
Width (m) (5.0%)	762.31	806.44	2788.09
Correlation (%)	89.40		55.8mm



	Horizontal		Vert
	Beam	Gaussian	Beam
Centroid (m)	3944.02		2888
Beam Peak (m)	3944.02	3944.02	3588.12
Width (m) (77.5%)	308.95	307.87	399.28
Width (m) (13.8%)	844.38	860.35	3721.22
Width (m) (5.0%)	1069.39	1058.13	3944.68
Correlation (%)	96.85		59.1mm

Available fan angle vs. optical efficiency

Fan angle (degree)	10	15	20	30	40	50
Output efficiency	50%	75%	50%	70%	70%	70%

Available laser diodes -

	5mW	7mW	10mW	20mW	30mW	40mW	50mW	90mW	100mW up
405nm	●		●	●			●	●	●
455nm							●	●	●
488nm							●	●	
505nm					●				
515nm			●	●	●		●		●
635nm	●	●	●	●	●				●
650nm	●	●	●	●	●				●
660nm						●			●
670nm		●	●						
680nm					●				
780nm	●		●	●			●	●	●
808nm							●		●
830nm					●	●			●
850nm	●				●		●	●	●
940nm									●
980nm							●	●	●

MTTF > 10,000Hrs