

CircularBeam Laser Diodes

CircuLaser™ Laser Diodes

Circular beam with diffraction-limited performance and low divergence in a standard package

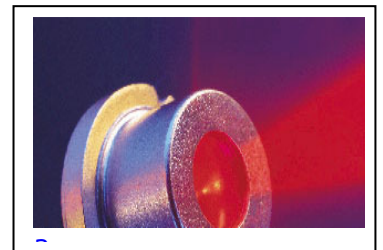
CircuLaser™ laser diodes integrate the patented μ Lens™ technology with a standard laser diode to generate a high power, low-divergence, circular, diffraction-limited beam. The μ Lens™ is mounted directly in front of the diode's emitting edge, capturing nearly 100% of the diode's power, circularizing the beam and correcting any aberrations, all in a single step. Because of these unique beam qualities, CircuLasers have demonstrated, for example, over 80% coupling efficiency in the visible range, into a single-mode fiber optic — up to twice that achieved by multi-macro-optics with standard laser diodes

The design complexity of customer systems is reduced in most applications by replacing multi-optical-element diode systems with a CircuLaser and typically a single correcting lens. In fact, for many applications, no additional correcting optics is required at all. The CircuLaser can reduce cost, as well as deliver more usable power. Circulasers are packaged exactly the same as a standard laser diode. The μ Lens™ is only apparent by the way it transforms and corrects the beam output. CircuLasers are available in standard 5.6mm and 9mm TO packages, allowing for direct use in a wide variety of applications.

List of Laser Diodes available

Wavelength	Output Power	Package Size	Part Number
635nm \pm 10nm	3mW	5.6mm	VPSL-0635-003-x-5-B
635nm \pm 10nm	5mW	9mm	VPSL-0635-005-x-9-B
635nm \pm 10nm	5mW	5.6mm	VPSL-0635-005-x-5-A
635nm \pm 10nm	5mW	5.6mm	VPSL-0635-005-x-5-B
635nm \pm 10nm	10mW	9mm	VPSL-0635-010-x-9-B
635nm \pm 10nm	10mW	9mm	VPSL-0635-010-A-9-B
635nm \pm 10nm	10mW	5.6mm	VPSL-0635-010-x-5-B
635nm \pm 10nm	15mW	9mm	VPSL-0635-015-x-9-B
639nm \pm 10nm	35mW	5.6mm	VPSL-0639-035-x-5-B
655nm \pm 10nm	5mW	5.6mm	VPSL-0655-005-x-5-B
658nm \pm 10nm	35mW	5.6mm	VPSL-0658-035-x-5-A
658nm \pm 10nm	50mW	5.6mm (no PD)	VPSL-0658-050-x-5-G
658nm \pm 10nm	80mW	5.6mm (no PD)	VPSL-0658-080-H-5-F
658nm \pm 10nm	100mW	5.6mm	VPSL-0658-100-x-5-B
670nm \pm 10nm	5mW	5.6mm	VPSL-0670-005-x-5-B
670nm \pm 10nm	10mW	9mm	VPSL-0670-010-x-9-B
690nm \pm 10nm	35mW	5.6mm	VPSL-0690-035-x-5-A
785nm \pm 10nm	25mW	5.6mm	VPSL-0785-025-x-5-B
785nm \pm 10nm	50mW	9mm	VPSL-0785-050-x-9-B
808nm \pm 10nm	100mW	9mm	VPSL-0808-100-x-9-B
808nm \pm 10nm	150mW	9mm	VPSL-0808-150-x-9-B
830nm \pm 10nm	30mW	9mm	VPSL-0830-030-x-9-B
830nm \pm 10nm	40mW	9mm	VPSL-0830-040-x-9-A
850nm \pm 4nm	50mW	9mm	VPSL-0852-050-x-9-B
850nm \pm 4nm	150mW	9mm	VPSL-0852-150-x-9-B

A, B, F and G are pin-out configurations

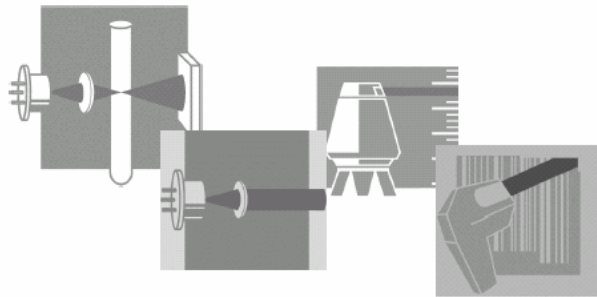


VIN KAROLA INSTRUMENTS

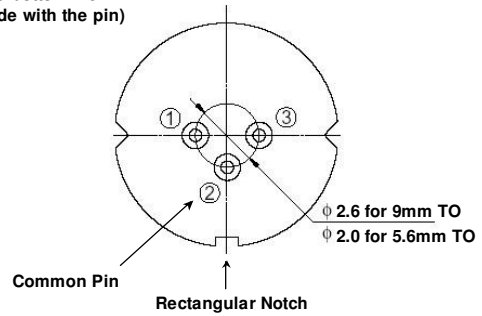
P.O. Box 922273
Norcross, GA 30010-2273
Tel: 770/409-1499
Fax: 770/447-8045
e-mail: info@vinkarola.com

Vin Karola reserves the right to make changes in Design, and specifications without notice or obligation.
© Vin Karola Instruments., 2002-2007

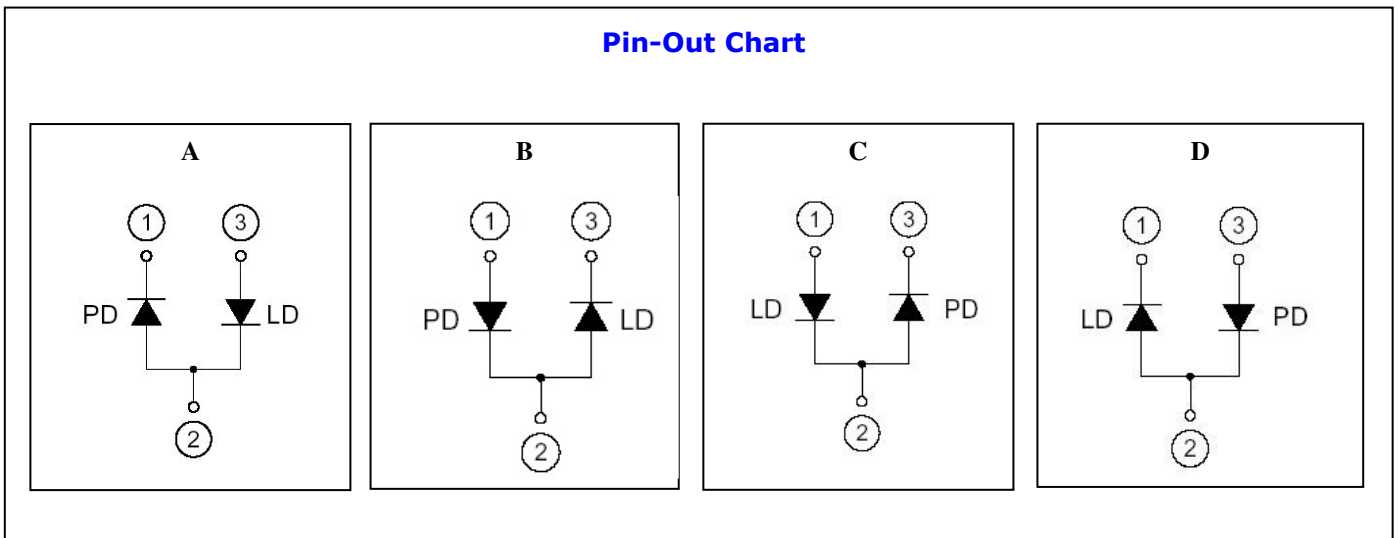
Circularity, Beam quality, and Beam divergence..... All in one



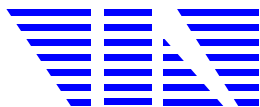
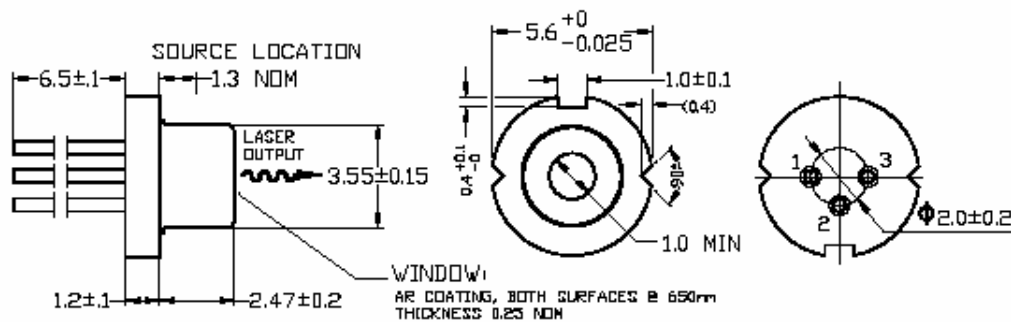
The bottom view
(Side with the pin)



Pin-Out Chart



Mechanical Package and Layout (TO-5.6 package shown)



VIN KAROLA INSTRUMENTS

P.O. Box 922273
Norcross, GA 30010-2273
Tel: 770/409-1499
Fax: 770/447-8045
e-mail: info@vinkarola.com