

<u>www.knightoptical.com</u> | Tel: +1 401 583 7846 | Fax: +1 401 583 7851

Knight Optical (USA) LLC | 1130 Ten Rod Road, Suite D102 | North Kingsdown RI 02852 USA

<u>www.knightoptical.com</u> | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 859555

Knight Optical (UK) Ltd Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

KO | BRINGING QUALITY INTO FOCUS

Moulded Aspheric Lenses for Laser Diode Collimators

Knight Optical can offer Custom Moulded Aspheric Lenses for use with Laser Diode Collimators.

Aspheric lens surfaces are used to correct spherical aberration (where the converging light from a lens does not have a common focal point, resulting in a distorted image) in lasers and imaging. Traditional spherical lenses cannot collimate light effectively because even small angles of incidence can produce spherical aberrations.

This can mean that several components may be required to get the desired result. The non-spherical surface of an aspheric lens allows a single component to effectively focus or collimate even highly divergent emissions, potentially replacing a multi-lens system with a single aspheric lens.

Therefore Aspheric Lenses that are moulded are ideal for use within laser diode-to-fibre coupling applications.

Typical specs:

Material: Optical Glass or Acrylic

Overall Diameter Tolerance: +/-0.2mm **Focal Length Tolerance:** ± <5%

Surface Quality: <60-40 Scratch/Dig

Coating: Optional

All our Moulded Aspheric Lenses are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory, using our Trioptics Optispheric, and Starrett AV300. This allows us to work to the highest <u>QA standards</u> and meet the tolerance specifications on these **precision components**.

Contact our technical sales team to discover how Knight Optical's high quality Dichroic Filters and superior service can improve your instrumentation and supply chain experience.

UK, Europe, Asia & RoW: E-Mail info@knightoptical.co.uk Tel +44 (0)1622 859444

USA & Canada: E-Mail <u>usasales@knightoptical.com</u> Tel +001 401-583-7846

- View our QA and metrology information
- Watch our Corporate Video
- View Our Corporate Brochure