

# 350 mW, 854 nm T0-56 Packaged Laser Diode

22045504



Lumentum is the worldwide leader in telecommunications-grade diode lasers used in the most demanding applications such as undersea, space, and high-data-rate systems. These lasers must operate with very low or even zero failure rates. Lumentum has applied their experience making and qualifying high-reliability semiconductor lasers to 8xx nm diode lasers, which have field-demonstrated high reliability.

**Key Features**

- 350 mW optical power
- 854 nm CWL
- +/-5 nm WL tolerance at 25°C, 350 mW

**Specifications**

Electro-Optical Performance (at 350 mW CW, 25°C, and 0.6 NA collection optics)

Laser Characteristics	Symbol	Minimum	Typical	Maximum	Unit
CW output power	$P_o$		350		mW
Center wavelength	$\lambda_{25C}$	849	854	859	nm
Spectrum width (90% intensity)				0.5	nm
Threshold current	$I_{th}$		34	50	mA
Slope efficiency	$S_{eff}$		1.1		W/A
Operating current	$I_{op}$		380	430	mA
Operating voltage	$V_{op}$		1.8		V
FWHM beam divergence					
Parallel to junction	$\theta_{//}$		8		deg
Perpendicular to junction	$\theta_{\perp}$		17		deg
FWHM beam pointing					
Parallel to junction	$d\theta_{//}$	-2.5		2.5	deg
Perpendicular to junction	$d\theta_{\perp}$	-2.5		2.5	deg

**Absolute Maximum Ratings (AMR)**

Max CW output power		–	–	450	mW
Operating temperature		-10°C	–	60	°C
Storage temperature		-40°C	–	85	°C
Reverse voltage, Laser		–	–	2	V
Reverse voltage, PD		–	–	30	V

**Mechanical Specifications**

- NOTES (UNLESS OTHERWISE SPECIFIED):
- ▲ LASER CATHODE (-)
  - ▲ LASER ANODE (+), CASE GROUND
  - ▲ PIN NOT CONNECTED
  - ▲ LD DIE CENTER SHALL BE PLACED ±50µm OF PACKAGE CENTERLINE FROM FRONT VIEW
  - ▲ ANGULAR POINTING OF LD DIE SHALL BE ±3° OF PACKAGE CENTERLINE FROM FRONT VIEW

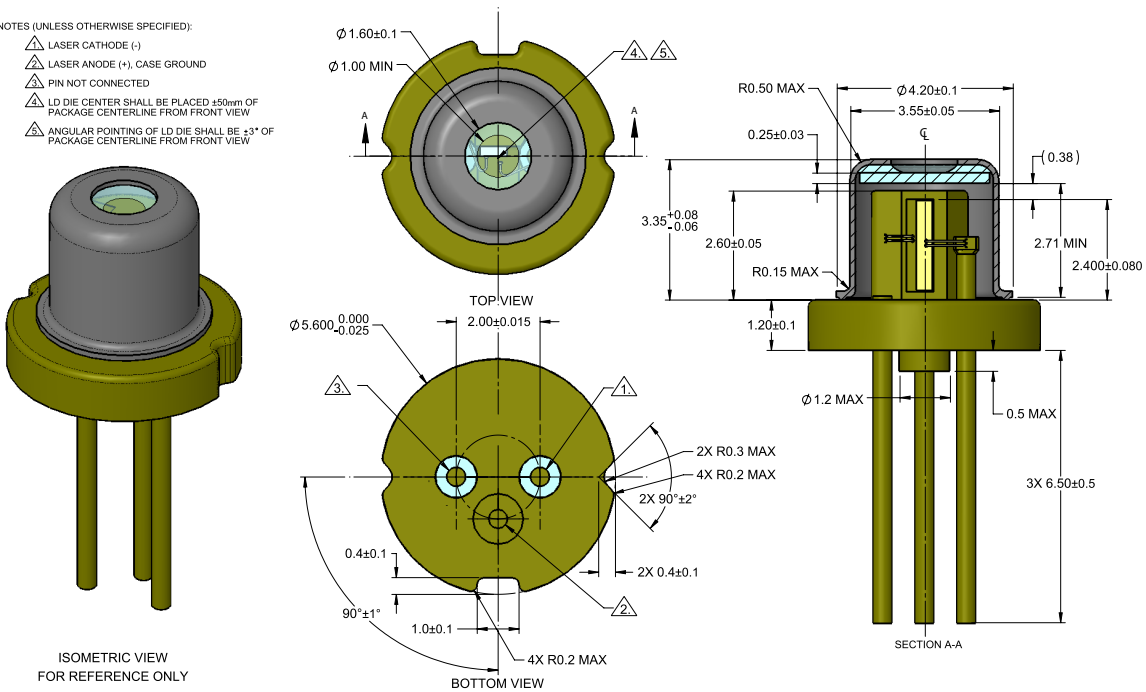


Figure 1: Mechanical specifications

### Ordering Information

For more information on this or other products and their availability, please contact your local Lumentum account manager or Lumentum directly at 844-810-LITE (5483) in North America and 800-000-LITE (5483) worldwide or via e-mail at [customer.service@lumentum.com](mailto:customer.service@lumentum.com).

Product Number	Description
22045504	350 mW Optical Power 854 nm TO-56 Packaged Diode Laser



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