

1550nm Multi-Junction Pulsed Laser Diodes

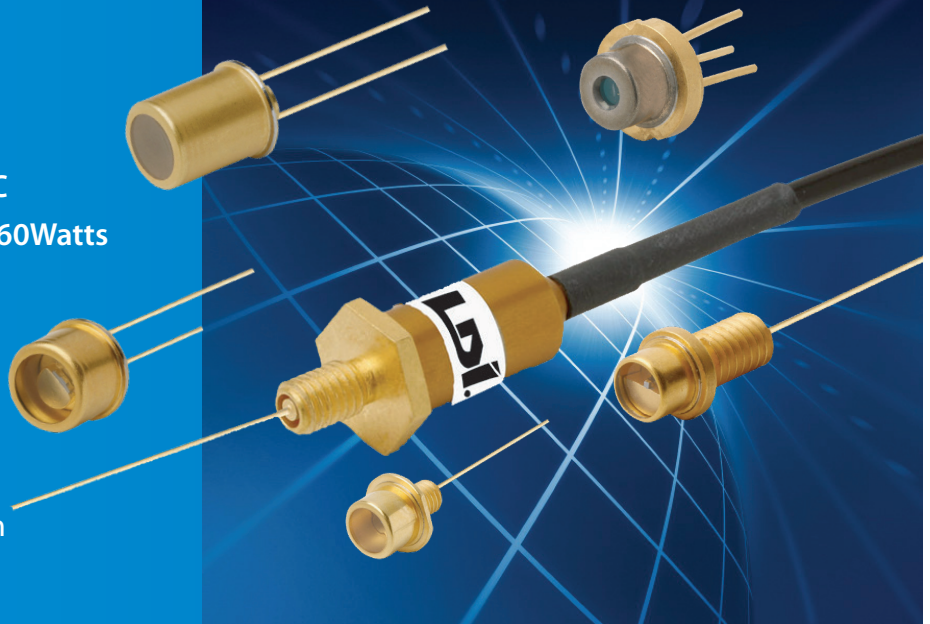
ISO 9001:2008 Certified

"Eye Safe"

- High Efficiency
- 90µm and 350µm Emitter Widths
- Stable Output from -40°C to +85°C
- Single and Stacked Devices up to 60Watts
- Hermetic Package
- RoHS Compliant

Applications:

- Rangefinding
- Surveying Equipment
- Friend or Foe Identification



CVLM Series Specifications and Limits @ 25°C

PARAMETERS	Symbol	Min	Typ	Max	Units
Peak Wavelength	λ	1530	1550	1570	nm
Spectral Width	$\Delta\lambda$	90	20		nm
Spectral Width		350	12		nm
Temperature Coefficient of Wavelength	$\Delta\lambda/\Delta T$		0.4		nm/°C
Beam Spread	FWHM		12 x 37		degrees
Operating Temperature	T_{op}	-40		85	°C
Storage Temperature	T_{stg}	-40		85	°C
Pulse Width	Pw			150	ns

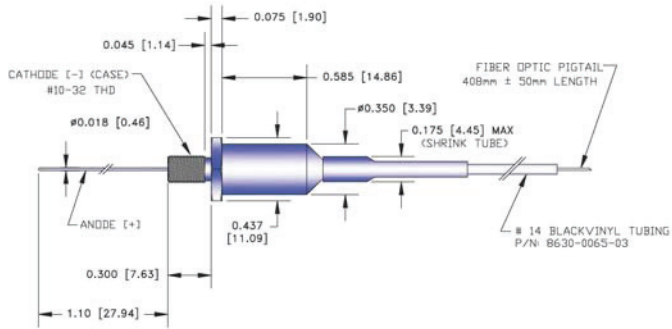
CVLM Series Test Conditions: Pulse width = 150ns, Rep. Rate = 5kHz, 25°C

PARAMETERS	Symbol	CVLM350	CVLM2S350	CVLM3S350	CVLM090	CVLM2S090	CVLM3S090	Units
Peak Power (min)	P_o	30	55	75	9	16	22	Watts
Peak Power (Fiber) ¹	P_f	15	27	37	4.5	8	11	Watts
Peak Forward Current	I_f	25	25	25	6.5	6.5	6.5	Amps
Threshold Current (typ)	I_{th}	2.5	2.5	2.5	0.5	0.5	0.5	Amps
Number of Diodes		1	2	3	1	2	3	
Emitting Area (typ)		10 x 350	120 x 350	240 x 350	10 x 90	120 x 90	240 x 90	Microns
Fiber (core size)		400	400	400	400	200	300	Microns
Duty Factor ²	DF	0.07	0.07	0.07	0.07	0.07	0.07	%

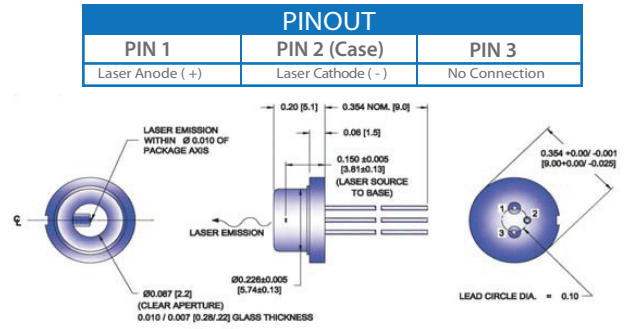
Note: All devices are supplied case (-) unless otherwise specified. 1 Fiber: 400 micron 0.37NA Hard Clad Silica. 2 Heat sinking required.

Package Drawings

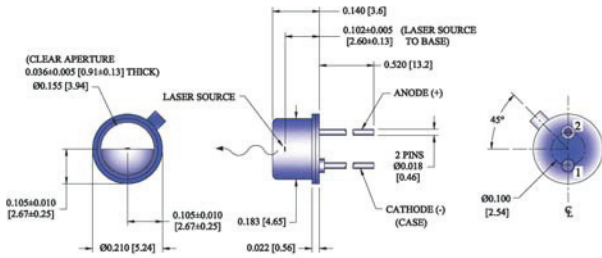
TO5F (Non-Hermetic) Package



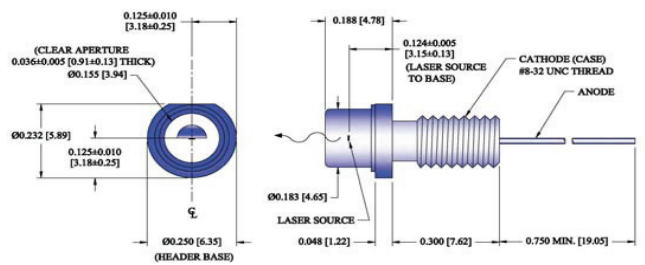
9 mm Package



TO18T Package

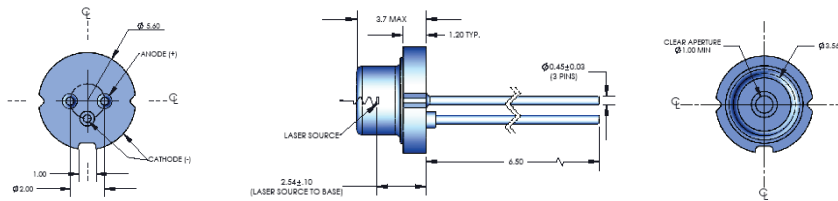


TO18TC Package



Other package options available. Dimensions: inches [mm]

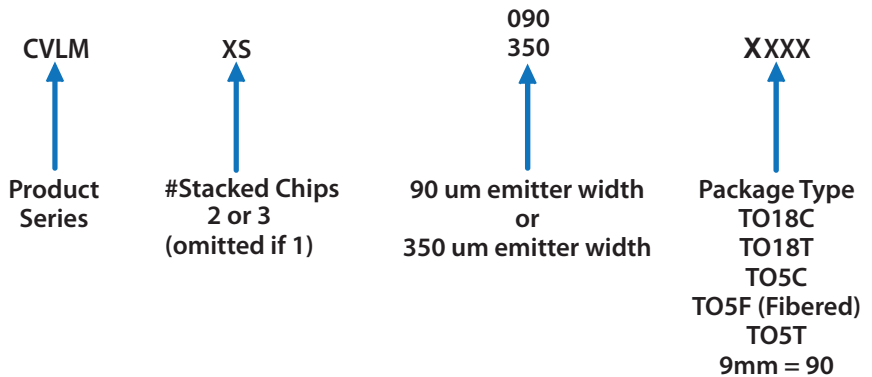
5.6 Package



Available with Single Chip Only

Ordering Information

When ordering, refer to the numbering diagram below.



Note: Not all options are available for all packages. Other power options are available. Fiber pigtailed versions of all lasers are available. Fiber length is 1 meter +/- 0.1 meter unless otherwise noted. Output is typically 50% of rated power on fibered devices.

Products can be ordered directly from OSI Laser Diode Inc. or its representatives. For a complete listing of representatives, visit our website at www.laserdiode.com

Safety:
Caution: Laser light emitted from any diode laser may be harmful to the human eye. Avoid looking directly into the diode laser aperture when the device is in operation.

Class 3B laser

Notice:
OSI Laser Diode Inc. reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.

ESD Caution:
Handle diode lasers with extreme care to prevent electrostatic discharge. Follow ESD precautions when handling devices.

Warranty:
Please refer to your product purchase agreement for complete details or check with your OSI Laser Diode sales representative.