

1550nm High Brightness Pulsed Laser Diodes

"Eye Safe"

Low Divergence / High Brightness
 Stable Output from -40°C to +85°C
 Hermetic Package
 RoHS Compliant

Military and Commercial Markets:

- Rangefinding
- Hunting
- Targeting
- Surveying



OSI Laser Diode Inc. provides an extremely high brightness CVLL 1550nm pulsed laser diode capable of up to 75 Watts output power. The CVLL devices are well suited to most range finding applications requiring "eye safe" operation.

CVLL Series Specifications and Limits @ 25°C

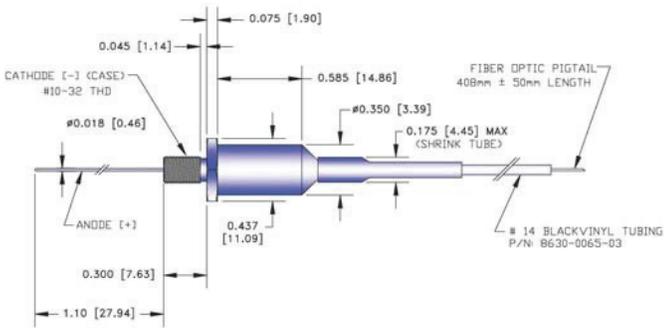
PARAMETERS	Symbol	Min	Typ	Max	Unit
Peak Wavelength	λ	1530	1550	1580	nm
Spectral Width	$\Delta\lambda$		15		nm
Temperature Coefficient of Wavelength	$\Delta\lambda/\Delta T$		0.55		nm/°C
Beam Divergence	FWHM		10 x 24		Degrees
Operating Temperature	T _{op}	-40		85	°C
Storage Temperature	T _{stg}	-40		85	°C
Pulse Width	PW		150		ns
Duty Factor	DF		0.07		%
Rise Time	T _f		1		ns
Fall Time	T _f		1		ns

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

PARAMETERS	Symbol	CVLL 95	CVLL 2S95	CVLL 3S95	CVLL 4S95	CVLL 5S95	CVLL 350	CVLL 2S350	CVLL 3S350	CVLL 4S350	CVLL 5S350	Unit
Peak Power (min)	P _o	10	20	30	40	50	25	50	75	100	125	Watts
Peak Power (Fiber)	P _f	5	10	15	20	25	12	25	37	50	62	Watts
Peak Forward Current	I _f	30	30	30	30	30	75	75	75	75	75	Amps
Threshold Current (typ)	I _{th}	1	1	1	1	1	2	2	2	2	2	Amps
Number of Diodes		1	2	3	4	5	1	2	3	4	5	
Emitting Area (typ)		95 x 1	95 x 180	95 x 360	95 x 540	95 x 720	350 x 1	350 x 180	350 x 360	350 x 540	350 x 720	um
Fiber (core size)		100	200	400	600	1000	400	400	400	600	1000	um

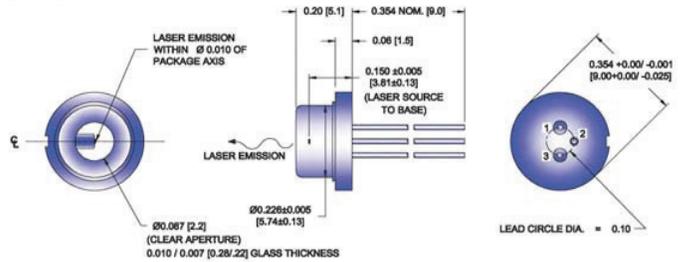
Package Drawings

TO5F (Non-Hermetic) Package

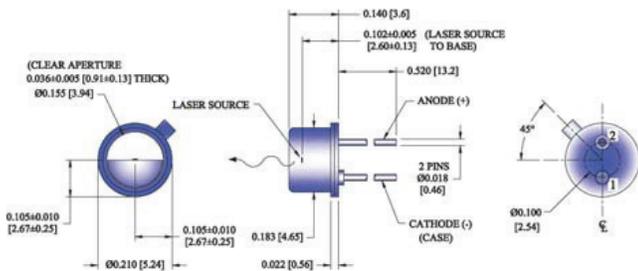


9mm Package

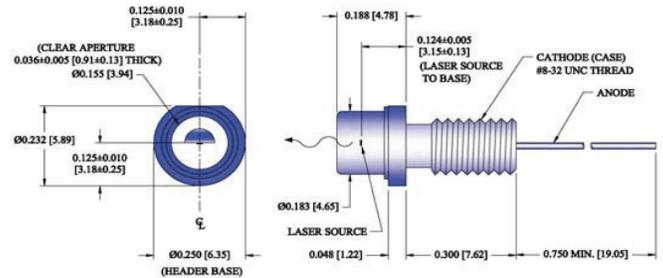
PINOUT		
PIN 1	PIN 2 (Case)	PIN 3
Laser Anode (+)	Laser Cathode (-)	No Connection



TO18T Package

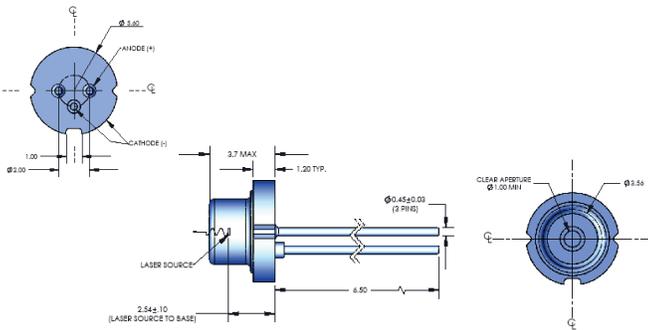


TO18C Package

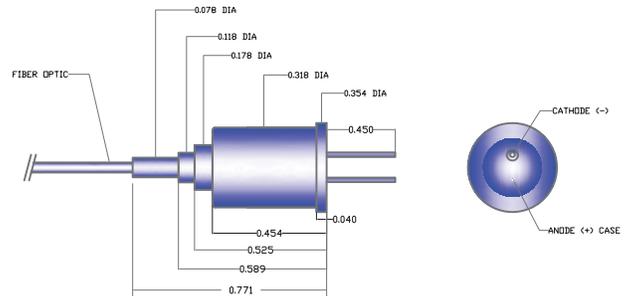


Note: All devices are supplied case (-) unless otherwise specified.

5.6 Package



TO18F Package



NOTE: This package option is available in single chip and 2 stack devices. This would include CVLL 95, CVLL 2S95, CVLL 350 & CVLL 2S350.

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**

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.

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.