

High Power Pulsed Laser Diodes

ISO 9001:2008 Certified

- High Efficiency / High Reliability
 - Stable Output from -40°C to +85°C
 - Single and Stacked Devices up to 100Watts
 - 850nm and 905nm Wavelengths
 - Hermetic Package
- Applications:
- Rangefinding / Ceilometers
 - Weapons Simulation
 - Optical Fuses
 - Surveying Equipment



CVD Series Characteristics @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Peak Wavelength	λ				nm
CVD 60 / 160 Series		895	905	915	nm
CVD 90 / 190 Series		840	850	860	nm
Spectral Width	$\Delta\lambda$		5.0	12	nm
Rise Time - Lasers	T_r		1		ns
Pulse Width = 50% pts	T_{pw}		100	200	ns
Beam Spread	FWHM		10 x35		degrees
Operating Temperature	T_{op}	-40		85	°C
Storage Temperature	T_{stg}	-55		85	°C

CVD 905nm Series Test Conditions: 100ns, 1 kHz, 25°C

Parameters	CVD 40	CVD 46	CVD 60	CVD 62	CVD 65	CVD 68	CVD 163	CVD 167	Units
Peak Power	2	3	4	8	13	22	35	100	Watts
Number of Diodes	1	1	1	1	1	1	3	5	
Emitting Area Typical	40 x 1	62 x 1	76 x 1	152 x 1	254 x 1	381 x 1	254 x 203	381 x 406	um
Peak If	2.6	4	5	10	15	25	15	25	Amps
Duty Factor (max)	0.1	0.1	0.1	0.1	0.1	0.1	0.08	0.04	%

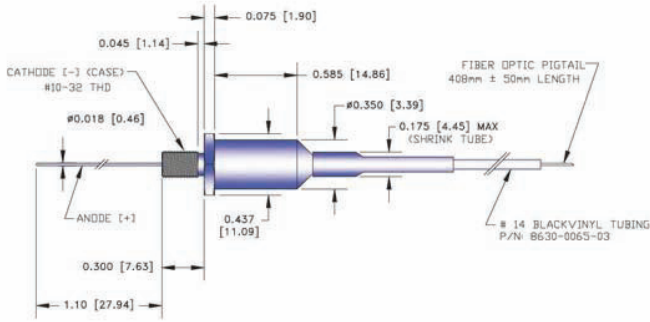
CVD 850nm Test Conditions: 100ns, 1 kHz, 25°C

Parameters	CVD 90	CVD 93	CVD 95	CVD 97	CVD 193	CVD 195	CVD 197	Units
Peak Power	5	10	15	25	40	60	100	Watts
Number of Diodes	1	1	1	1	3	3	5	
Emitting Area Typical	76 x 1	152 x 1	254 x 1	381 x 1	254 x 203	381 x 203	381 x 406	um
Peak If	7	14	20	30	20	30	30	Amps
Duty Factor (max)	0.1	0.1	0.1	0.1	0.08	0.04	0.04	%

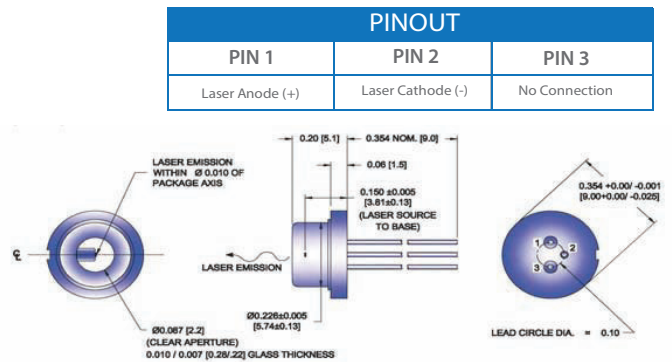
Note: All devices are supplied case (-), unless otherwise specified.

Package Drawings

TO5F (Non-Hermetic) Package

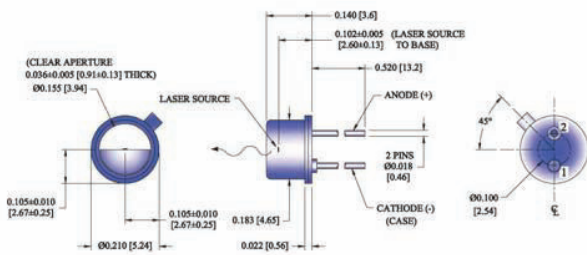


9 mm Package

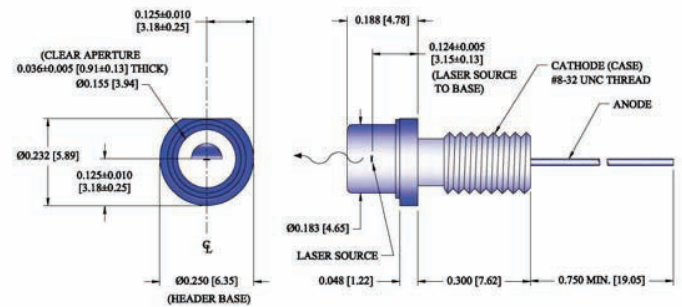


PINOUT		
PIN 1	PIN 2	PIN 3
Laser Anode (+)	Laser Cathode (-)	No Connection

TO18T Package

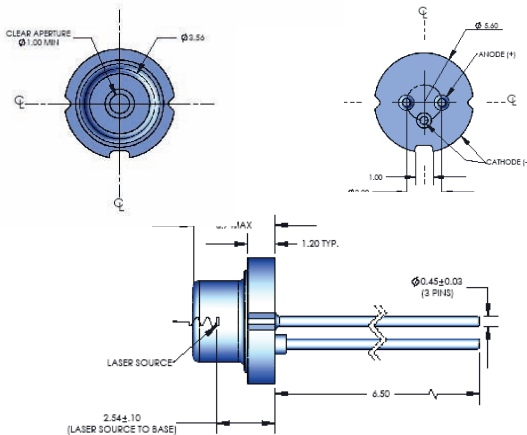


TO18C Package



5.6mm Package

Note: Available with Single Chip Only



Other package options available. Dimensions: inches [mm]

Ordering Information

When ordering, refer to the information below.

CVD		XX-XXXX
OUTPUT POWER		
40 = 2 Watt	} 905 nm	PACKAGE TO18C = TO18 Coax TO18T = TO18 Twin Lead TO5C = TO5 Coax TO5F = TO5 Non-Hermetic (fibred) TO5T = TO5 Twin Lead 90 = 9mm
46 = 3 Watt		
60 = 4 Watt		
62 = 8 Watt		
65 = 13 Watt		
68 = 22 Watt		
163 = 35 Watt	} 850 nm	
167 = 100 Watt		
90 = 5 Watt		
93 = 10 Watt		
95 = 15 Watt		
97 = 25 Watt		
193 = 40 Watt		
195 = 60 Watt		
197 = 100 Watt		

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

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 for fibred products.

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.

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.