OSI LaserDiode, Inc.

An OSI Systems Company

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www.laserdiode.com

High Power Monolithic Stack Pulsed Laser Diodes

ISO 9001:2008 Certified

High Reliability/High Efficiency
Stable Output from -40°C to +85°C
Single & Stacked Devices up to 375W
Fiber Coupled Devices up to 188W
Custom Packaging Available

Applications:

- Rangefinding
- Ceilometers
- Weapons Simulation
- Surveying Equipment
- Homeland Security
- LIDAR
- Adaptive Cruise Control



CVN Series Drive Conditions: 100ns 30Amps 1kHz @ 25°C

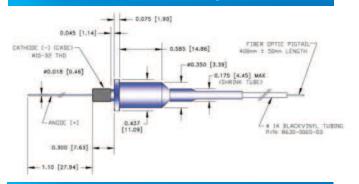
| PARAMETERS | Symbol | Min | Тур | Max | Units |
|-----------------------|------------------|-----|--------|-----|---------|
| Peak Wavelength | λ | 895 | 905 | 915 | nm |
| Spectral Width | Δλ | | 8 | | nm |
| Rise Time | Tr | | 1 | | ns |
| Beam Spread | | | 9 x 25 | | Degrees |
| Duty Cycle | DC | | | 0.1 | Percent |
| Operating Temperature | T _{op} | -40 | | 85 | °C |
| Storage Temperature | T _{stg} | -40 | | 85 | °C |

| PARAMETERS | Symbol | CVN 63 | CVN 2S63 | CVN 3S63 | CVN 4S63 | CVN 5S63 | Units |
|-------------------------|----------------|----------|-----------|-----------|-----------|-----------|---------|
| Threshold Current (typ) | Ith | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | Α |
| Peak Forward Current | I _f | 30 | 30 | 30 | 30 | 30 | А |
| Peak Power 25°C (typ) | Po | 75 | 150 | 225 | 300 | 375 | W |
| Peak Power 85°C (typ) | Po | 60 | 120 | 180 | 240 | 300 | W |
| Emitting Area | | 200 x 10 | 200 x 120 | 200 x 240 | 200 x 360 | 200 x 480 | Microns |
| Fiber Core Diameter* | | 200 | 300 | 300 | 400 | 600 | Microns |
| Power from Fiber (typ) | P_f | 38 | 75 | 112 | 150 | 188 | W |

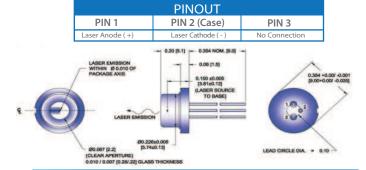
Notes: All devices supplied case (-) unless otherwise specified.

^{*}Note: Other fiber sizes are available

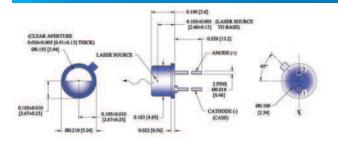
TO5F (Non-Hermetic) Package



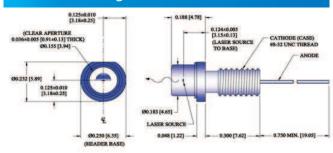
9 mm Package



TO18T Package

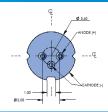


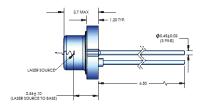
TO18C Package

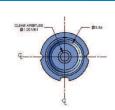


Other package options available. Dimensions: inches [mm]

5.6 mm Package







Available with Single Chip Only

Ordering Information

Note: Fiber length is 1 meter +/- 0.1

Output is typically 50% of rated power

meter unless otherwise noted.

for fibered products.

When ordering, refer to the numbering diagram below.

63-

XXX
Package
TO5C = Coax

TOST = Twin TOSF = Fibered

TO18C = Coax TO18T = Twin

90 = 9mm 56 = 5.6mm

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

Handle diode lasers with extreme care to

precautions when handling devices.

prevent electrostatic discharge. Follow ESD

ESD Caution:

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.

Warranty:

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