COVEGA

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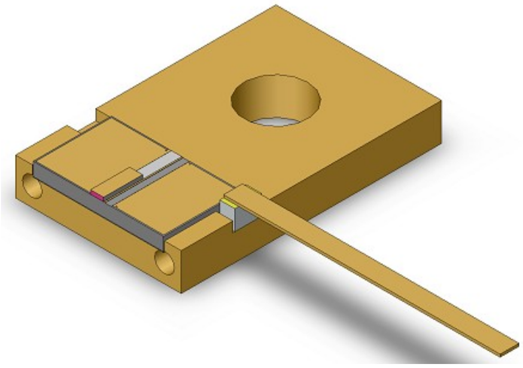
# BAL 1115: 1600nm / 0.5W Broad Area Laser Diode Chip

7.1.2.SP.1115 Rev B Preliminary Model

## Description

COVEGA's broad area laser diode is based on a highly efficient InP/InGaAsP Quantum Well (QW) layer structure.

Advanced MBE epitaxial wafer growth techniques and die bonding processes enable reliable high-power laser diode operation.



## Features

High Optical Output Power
High Slope Efficiency
Numerous Packaging Options

## Applications

- ✓ Medical
- ✓ Industrial
- ✓ Source Laser for Free Space Optical Wireless Communication

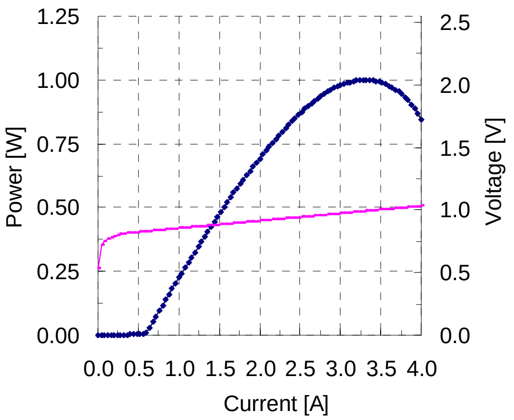
## Specifications

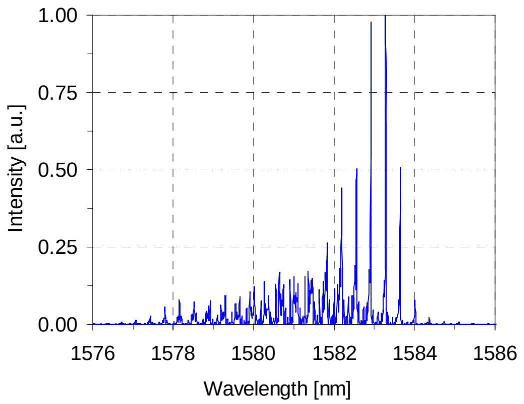
CW, T (Chip) = 25°C

| **Parameter** | | **Min** | **Typ** | **Max** | |
|---|---|---|---|---|---|
| Operating Current | $I_{OP}$ | | 1.7 | 2.2 | A |
| Center Wavelength | $\lambda_C$ | 1580 | 1600 | 1620 | nm |
| Spectral Bandwidth (rms) | $\Delta\lambda$ | | 7 | 14 | nm |
| Output Power over C-Band | $P_{OUT}$ | 0.5 | | | W |
| Threshold Current | $I_{TH}$ | | 0.5 | 0.8 | A |
| Slope Efficiency | $\Delta P/\Delta I$ | 0.3 | 0.4 | | W/A |
| Forward Voltage | V | | 3 | 4 | V |
| | | | | | |
| Chip Length | L | | 0.6 | | mm |
| Emitter Width | W | | 100 | | µm |
| Beam Divergence Angle (FWHM) | | | | | |
| - Transverse | $\theta_T$ | | 28 | 36 | deg |
| - Lateral | $\theta_L$ | | 8 | 14 | deg |
| SPECIFICATIONS SUBJECTED TO CHANGE WITHOUT NOTICE | | | | | |

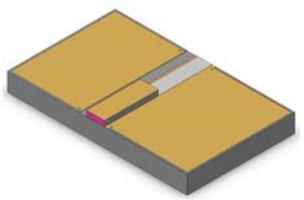
# BAL 1115

## Performance

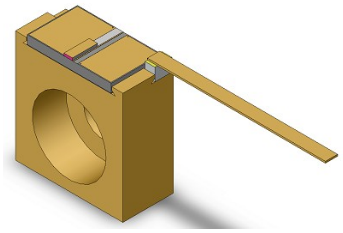




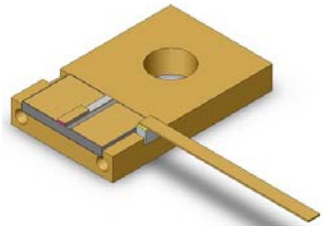
## Packaging



Chip on Submount



C-Mount



CT-Mount

## Ordering Information

| BAL 1115 - XXX | |
|---|---|
| XXX | |
| **Submount** | |
| COS = Chip on submount | |
| CMN = C-Mount | |
| CTM = CT-Mount | |
| ZZZ = Custom Mount | |