

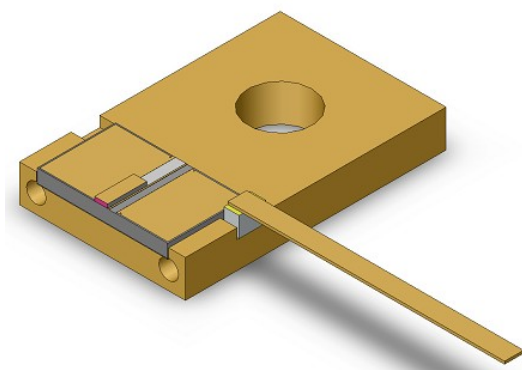
BAL 1116: 1600nm / 1.0W Broad Area Laser Diode Chip

7.1.2.SP.1116 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

Applications

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

- High Optical Output Power
- High Slope Efficiency
- Numerous Packaging Options

Specifications

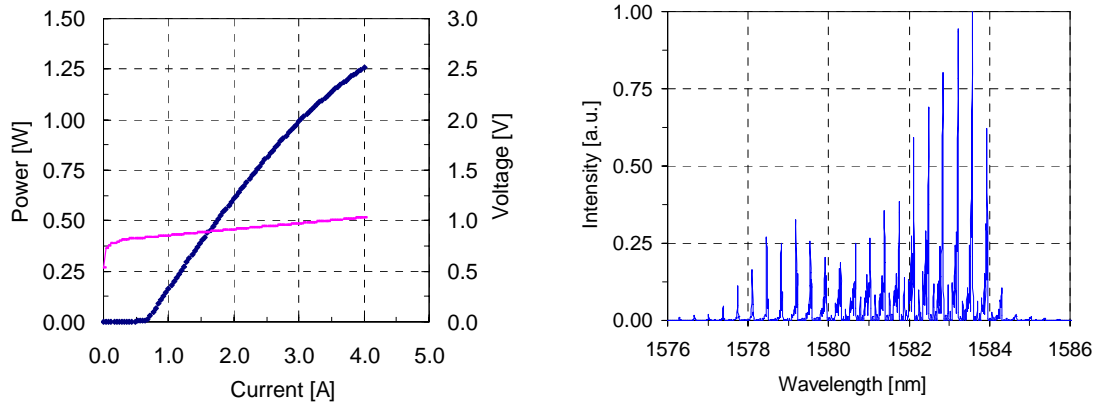
CW, T (Chip) = 25°C

| Parameter | | Min | Typ | Max | |
|------------------------------|---------------------|------|------|------|---------------|
| Operating Current | I_{OP} | | 3.5 | 4.2 | A |
| Center Wavelength | λ_C | 1580 | 1600 | 1620 | nm |
| Spectral Bandwidth (rms) | $\Delta\lambda$ | | 8 | 16 | nm |
| Output Power over C-Band | P_{OUT} | 1.0 | | | W |
| Threshold Current | I_{TH} | | 0.65 | 0.9 | A |
| Slope Efficiency | $\Delta P/\Delta I$ | 0.3 | 0.4 | | W/A |
| Forward Voltage | V | | 3 | 4 | V |
| Chip Length | L | | 1.0 | | mm |
| Emitter Width | W | | 100 | | μm |
| Beam Divergence Angle (FWHM) | | | | | |
| - Transverse | θ_T | | 28 | 36 | deg |
| - Lateral | θ_L | | 8 | 14 | deg |

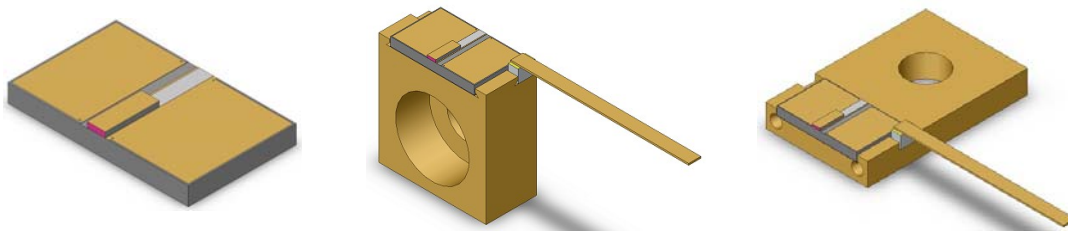
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

BAL 1116

Performance



Packaging



Chip on Submount

C-Mount

CT-Mount

Ordering Information

| | |
|------------------------|--|
| BAL 1116 - XXX | |
| XXX | |
| Submount | |
| COS = Chip on submount | |
| CMN = C-Mount | |
| CTM = CT-Mount | |
| ZZZ = Custom Mount | |

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