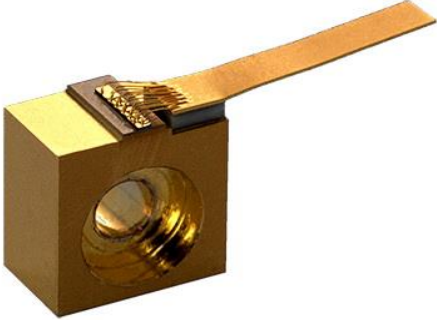


| <b>BA-1320-CM-3W</b><br>High Power Broad-Area Laser Diode on Open Heatsink        |  |
|---|--|
|  | <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Output power 3W @ 1320nm in CW mode</li> <li>• Proprietary mirror coating technology enabling high reliability</li> <li>• Reliable Au/Sn bonding of chip to composite submount</li> <li>• RoHS compliance</li> </ul> <p><b>Applications:</b></p> <ul style="list-style-type: none"> <li>• Medical Devices</li> <li>• Sensors</li> <li>• Scientific Research et al.</li> </ul> |
| <b>Rev:</b> 01-01   | <b>Date:</b> 22 Feb 2023   |

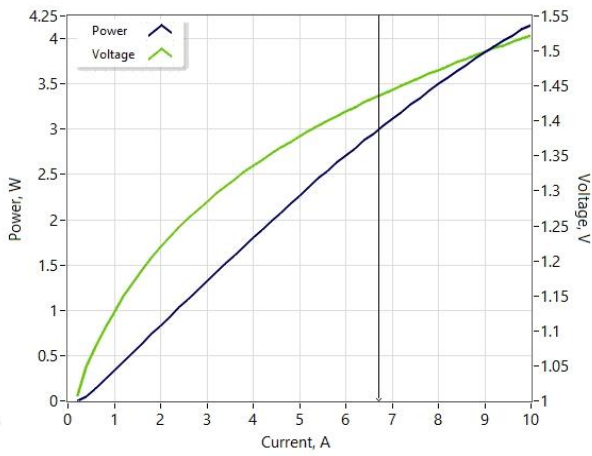
| Recommended Operating Conditions       |      |      |      |      |
|--|------|------|------|------|
| Sample is mounted on a copper heatsink |      |      |      |      |
| Parameter                              | Min. | Typ. | Max. | Unit |
| Heatsink Temperature                   |      | 25   |      | °C   |
| Forward Current                        |      | 7    | 8.5  | A    |
| Output Power                           | 0.3  |      | 3    | W    |

| Characteristics                      |      |      |      |       |
|--------------------------------------|------|------|------|-------|
| Tested for each sample @ CW, 25C, 7A |      |      |      |       |
| Parameter                            | Min. | Typ. | Max. | Unit  |
| Output Power @ 8.5A                  | 3    |      |      | W     |
| Forward Voltage                      |      | 1.5  | 1.9  | V     |
| Threshold Current                    |      | 0.3  | 0.7  | A     |
| Mean Wavelength                      | 1310 | 1320 | 1330 | nm    |
| Bandwidth (FWHM)                     |      | 10   | 16   | nm    |
| Wavelength Temperature Tunability    |      | 0.5  |      | nm/°C |
| Slow Axis Beam Divergence (FWHM)     | 4    | 8    | 13   | deg   |
| Fast Axis Beam Divergence (FWHM)     |      | 40   | 45   | deg   |
| Mesa Width                           |      | 90   |      | µm    |
| Polarization                         |      | TE   |      |       |

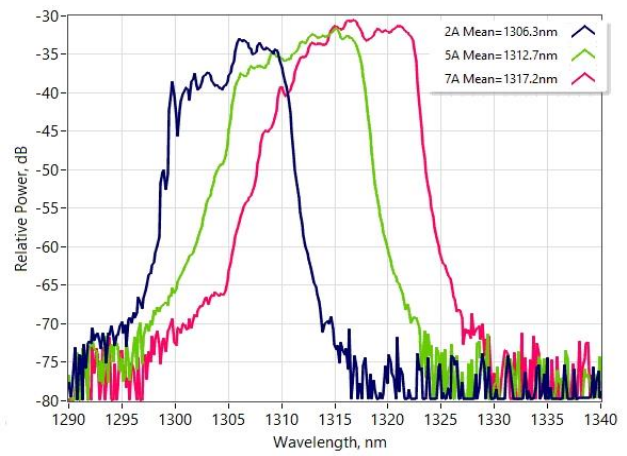
| Absolute Maximum Ratings                |     |     |      |
|---|-----|-----|------|
| Parameter                               | Min | Max | Unit |
| Forward Current (CW)                    |     | 9   | A    |
| Reverse Voltage                         |     | 2   | V    |
| Soldering Temperature (5 sec. max)      |     | 250 | °C   |
| Operating temperature (above dew point) | 5   | 60  | °C   |
| Storage Temperature                     | -40 | 85  | °C   |

**Typical Performance (for reference only)**

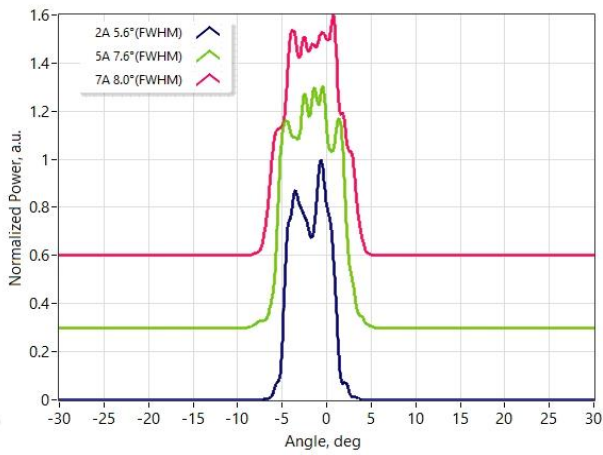
**Light-Current-Voltage Characteristics**



**Optical Spectra (res. 1nm)**



**Slow Axis Far Field**



**Fast Axis Far Field**

