

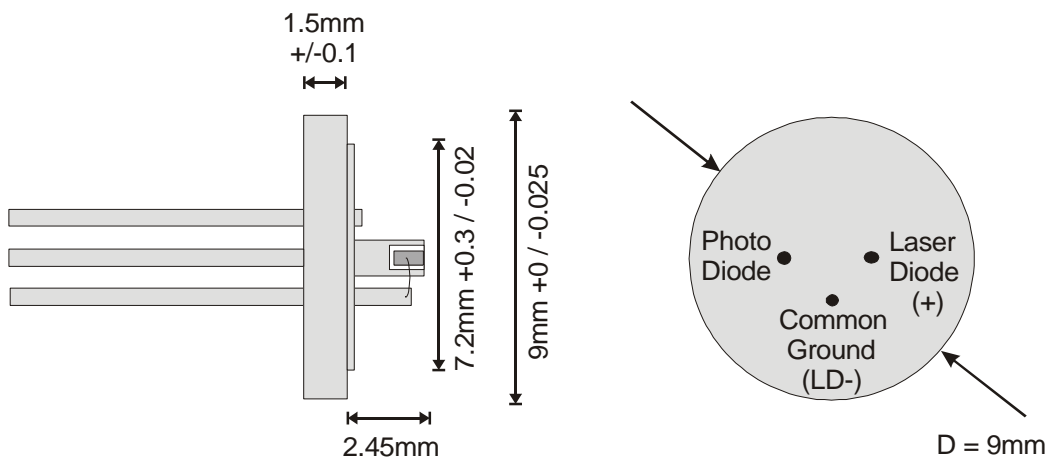
## Model-No.: DFB-1665-003, DFB Diode Laser

**Description:** The DFB-1665-003 is a MOVPE grown GaInAsP/InP Distributed Feedback diode laser. The chips are mounted in 9mm TO-can. The diode laser operates spatially and longitudinally single mode.

**Characteristics:** The characteristics are measured at 25°C operation temperature.

| Paramter                       | Symbol                   | Unit    | Min.                        | typ. | max. |
|--------------------------------|--------------------------|---------|-----------------------------|------|------|
| Center Wavelength              | $\lambda_c$              | nm      | 1660                        | 1665 | 1670 |
| Spectral Width                 | $\Delta\lambda$          | MHz     |                             | 5    | 10   |
| Temperature Coefficient        | $\Delta T/\Delta\lambda$ | m/K     |                             | 0.09 |      |
| Output Power                   | $P_{opt}$                | mW      |                             | 2    | 3    |
| Slope Efficiency               | $\eta$                   | mW/mA   | 0.09                        | 0.12 | 0.15 |
| Threshold Current              | $I_{th}$                 | mA      | 25                          | 30   | 35   |
| Operation Current @ 3mW        | $I_{op}$                 | mA      |                             | 60   | 85   |
| Chip Length                    | $L_c$                    | $\mu m$ |                             | 600  |      |
| Emitter width                  | $W_c$                    | $\mu m$ |                             | 2.9  |      |
| Beam Divergence    (FWHM)      | $\theta_{  }$            | deg.    |                             | 16   |      |
| Beam Divergence $\perp$ (FWHM) | $\theta_{\perp}$         | deg.    |                             | 30   |      |
| Polarzation                    |                          |         |                             | TE   |      |
| Mode Structure                 |                          |         | fundamental transverse mode |      |      |

**Laser Mount:** 9mm TO-can without monitor diode



Side View of the Laser Mount

Rear View of the Laser Mount

Document: <http://data.sacher-laser.com/dbr/DFB1665003.pdf>  
 Note: Specification are subject to change without further notice

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