

## 976nm 15W Single-emitter Laser Diode

Part number STR-976A-190-15-4-SE

|                             | Symbol           | Typ. | Unit   |
|-----------------------------|------------------|------|--------|
| Operation                   |                  |      |        |
| Central wavelength          | $\lambda$        | 976  | nm     |
| Output power                | $P_o$            | 15.5 | W      |
| Operation mode              |                  | CW   |        |
| Geometrical                 |                  |      |        |
| Emitter width               | W                | 190  | um     |
| Cavity length               | L                | 4000 | um     |
| Chip width                  | W                | 500  | um     |
| Chip height                 | H                | 150  | um     |
| Electro-optical data        |                  |      |        |
| Threshold current           | $I_{th}$         | 1.1  | A      |
| Operating current           | $I_{op}$         | 15   | A      |
| Operating voltage           | $V_{op}$         | 1.6  | V      |
| Slope efficiency            | $\eta d$         | 1.1  | W/A    |
| Total conversion efficiency | $\eta$           | 64   | %      |
| Slow axis divergence        | $\theta$         | 10   | degree |
| Fast axis divergence        | $\theta$         | 29   | degree |
| Spectral width              | $\Delta \lambda$ | 4    | nm     |
| Polarisation                |                  | TM   |        |

The above specifications are based on COS (Chip On Submount), 25 degree. The divergences cover 95% energy and the spectral is FWHM (Full width half maximum).

