



PRODUCT DATA SHEET

Laser Diode

Model FB-S1600-30SOT148

| Specification | Symbol | Typical | Unit |
|---|--------------------------|--|----------------------------------|
| Laser Emitter | | | |
| Peak Wavelength | λ_{op} | 1600±20 | nm |
| CW Optical Output Power | P_{op} | 30 | mW |
| Operation Current | I_{op} | <180 | mA |
| Operation Voltage | U_{ld} | 0.9±0.15 | V |
| Threshold Current | I_{th} | <45 | mA |
| Beam Divergence (FWHM) | $\theta_{ }$ | 15±2 | degree |
| Beam Divergence (FWHM) | θ_{\perp} | 50±5 | degree |
| Spectrum Half-Width (FWHM) | $\Delta\lambda$ | <5 | nm |
| Emitting Area | $W \times d$ | 6x1 | $\mu\text{m} \times \mu\text{m}$ |
| Wavelength Temperature Coefficient | $\Delta\lambda/\Delta T$ | 6.5±0.5 | Å/degree |
| Operation Power Temperature Coefficient | $\Delta P/\Delta T$ | 0.2±0.05 | mW/degree |
| Operation Current Temperature Coefficient | $\Delta I/\Delta T$ | 0.8±0.05 | mA/degree |
| Mode Structure | SM | TE ₀₀ | - |
| Operation Temperature | T_{op} | 25 | degree |
| Operation Temperature Range | | -40... +50 | degree |
| Storage Temperature Range | | -40... +80 | degree |
| Operation Mode | CW Pulse | Continuous Wave Pulse, $\tau > 5$ ns | - |
| Photo Diode Monitor | | | |
| Monitor Current | | 1-1000 | μA |
| PD Reverse Voltage | | <5 | V |

Note: To guarantee reliable operation of laser diode SOT-148 package must be mounted onto copper carrier with TEC (Peltier element) keeping constant temperature.



Drawings:

