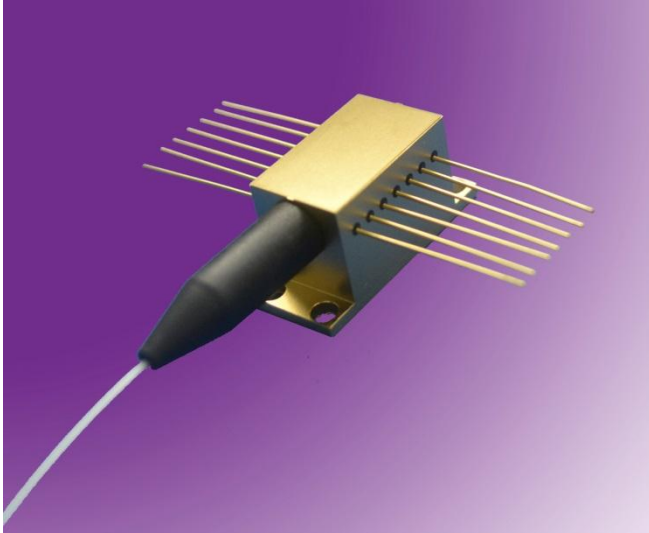


635nm 500mW Laser Diode Module

R635±3-500mWF-14BTF-T



Feature

Output power: 500mW

Wavelength: 635±3nm

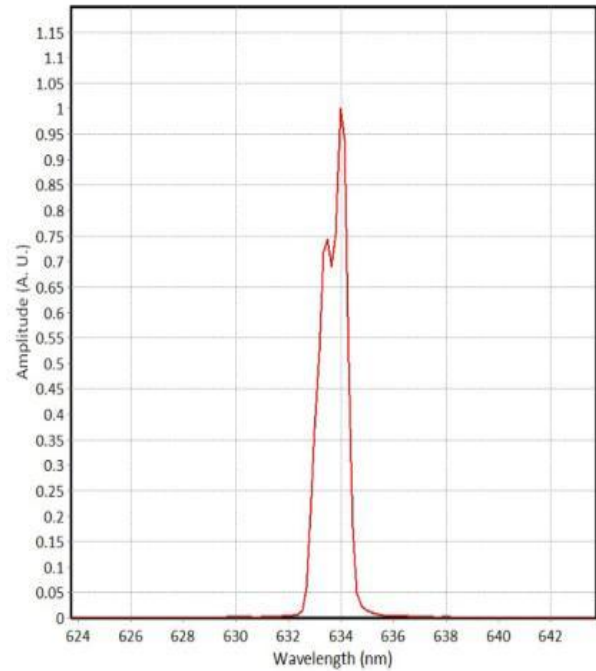
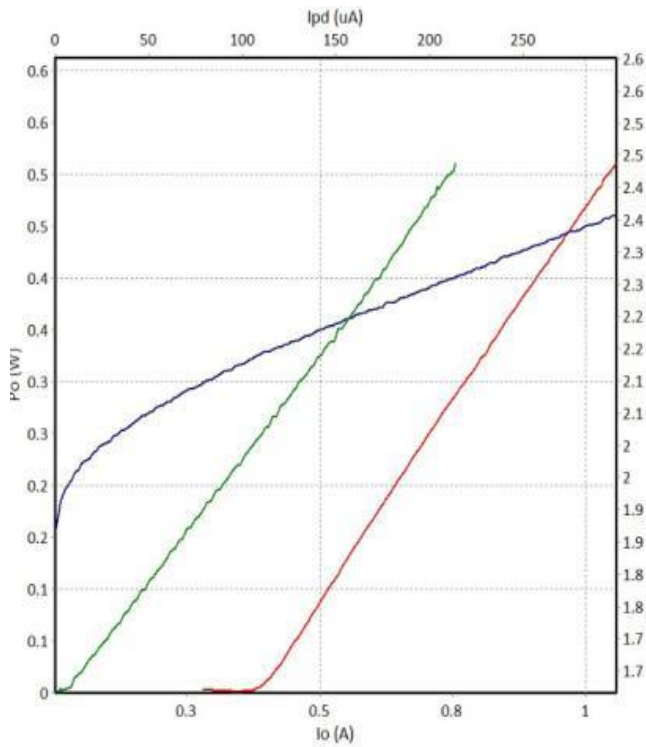
Fiber core: 200 μm, 0.22NA

Application

Medical use

Laser display

635nm 500mW Characteristics (20°C)



Typical Device Performance(25°C)

| Parameter | | Symbol | Typical Value | Unit |
|------------|---------------------------------|----------------------------|-----------------------|------------|
| | | | R635±3-500mWF-14BTF-T | |
| Optical | CW Output Power | Pop | 500 | mW |
| | Center Wavelength | λ_c | 635±3 | nm |
| | Spectral Width | $\Delta\lambda$ | ≤3 | nm |
| | Temperature drift of wavelength | $\Delta\lambda / \Delta T$ | 0.3 | nm/°C |
| Electrical | Threshold Current | I _{th} | 0.39 | A |
| | Operating Current | I _{op} | 1.04 | A |
| | Operating Voltage | V _{op} | 2.35 | V |
| | Slope Efficiency | η_{es} | 0.77 | W/A |
| | PD Parameter | I _{pd} | <2000 | μA |
| | Thermistor | R _t | 10±5%/3450 | kΩ/β(25°C) |
| | TEC max Current | I _{max} | 2.2 | A |
| | TEC max Voltage | V _{max} | 8.7 | V |
| Fiber | Fiber Core Diameter | d _{core} | 200 | μm |
| | Fiber Clad Diameter | d _{clad} | 220 | μm |
| | Fiber Buffer Diameter | d _{buffer} | 400 | μm |
| | Numerical Aperture | NA | 0.22 | - |
| | Connector | - | FC/PC,ST,SMA905 | - |

Other Parameters

| Parameter | Operating Temperature /°C | Operating Relative Humidity /% | Storage Temperature /°C | Storage Relative Humidity /% | Lead Soldering Temperature (max/°C) |
|-----------|---------------------------|--------------------------------|-------------------------|------------------------------|-------------------------------------|
| Min | 10 | - | -20 | - | - |
| Max | 30 | 75 | 70 | 90 | 250(10Sec.) |

Package Dimensions (mm)

| Pin | Function | Pin | Function |
|-----|------------|-----|----------|
| 1 | TEC(+) | 8 | -- |
| 2 | Thermistor | 9 | -- |
| 3 | PD(P) | 10 | Laser(+) |
| 4 | PD(N) | 11 | Laser(-) |
| 5 | Thermistor | 12 | -- |
| 6 | -- | 13 | Case |
| 7 | -- | 14 | TEC(-) |

