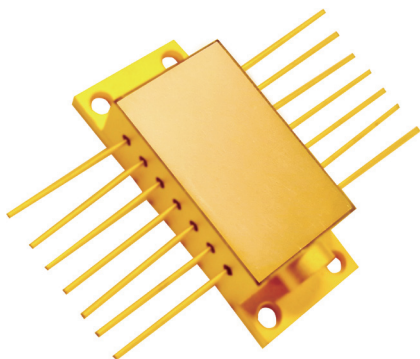


14SBTF Single Mode Free Space Diode Laser Components



14SBTF Single Mode Free Space Diode Laser Components, are featured products of RealLight's NL product line, utilizing wavelength-locking technique with volume Bragg gratings (VBG) and single-mode chip, delivering stabilized output spectrum and low temperature dependence of the lasing wavelength, making them ideal for Raman Microscopy.

Key Features

- ◆ Compact design
- ◆ High stability
- ◆ Excellent reliability

Applications

- Medical application
- Spectrum analysis
- Scientific research

Technical Specifications (25°C)

Package Type		14SBTF (Free Space)	
Center Wavelength (nm)		785	1064
Optical	CW Output Power / P _{op} (mW)	100	300
	Wavelength Tolerance (nm)	±0.5	
	Spectral Width / Δλ (nm)	0.1	
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	≤0.01	
	Temperature Drift of Current / ΔI/ΔI _{op} (nm/A)	0.05	
Electrical	Threshold Current / I _{th} (mA)	40	50
	Operating Current / I _{op} (mA)	150	500
	Operating Voltage / V _{op} (V)	2	
	Slope Efficiency / η _{es} (W/A)	0.9	0.7
	PD Parameter / I _{pd} (μA)	<2000	
	Thermistor Rt (kΩ/β(25°C))	3930	3450
	TEC Max Current I _{max} (A)	2.5	
TEC Max Voltage V _{max} (V)	6.3		

Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Humidity /%	Lead Soldering Temperature (max/°C)
Min(785nm)	25	-	-20	-	-
Max(785nm)	30	75	70	90	250(10Sec.)
Min(1064nm)	25	-	-20	-	-
Max(1064nm)		75	70	90	250(10Sec.)

