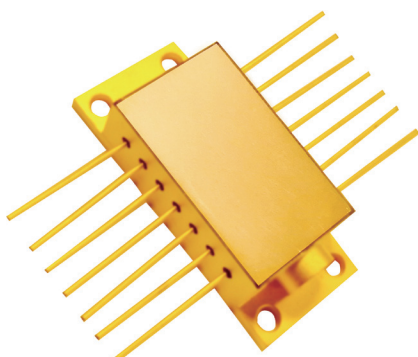


# 14SBTF Single Mode Free Space Diode Laser Components

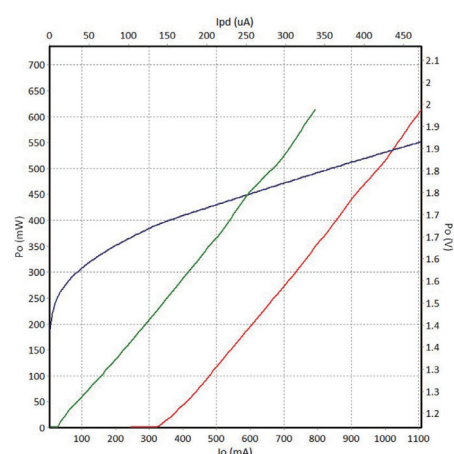


## Applications

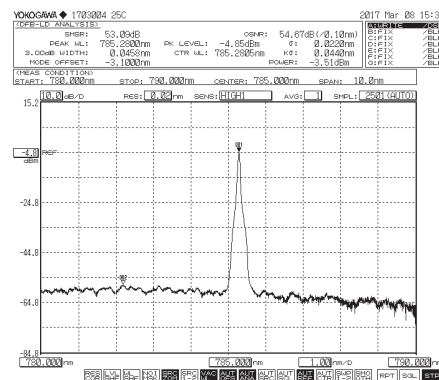
- Medical use
- Spectrum analysis
- Scientific research

## Technical Specifications (25°C)

Package Type		14SBTF	
Center Wavelength (nm)		785	1064
Optical	CW Output Power / Pop (mW)	100	150
	Wavelength Tolerance (nm)	±0.5	±0.5
	Spectral Width / $\Delta\lambda$ (nm)	<0.1	
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	≤0.01	
	Temperature Drift of Current / $\Delta I/\Delta I_{op}$ (nm/A)	0.05	
Electrical	Threshold Current / $I_{th}$ (mA)	40	40
	Operating Current / $I_{op}$ (mA)	150	210
	Operating Voltage / $V_{op}$ (V)	2	
	Slope Efficiency / $\eta_{es}$ (W/A)	0.9	
	PD Parameter / $I_{pd}$ (μA)	<2000	
	Thermistor $R_t$ (kΩ/β(25°C))	10±5%/3930	
	TEC Max Current $I_{max}$ (A)	2.5	
	TEC Max Voltage $V_{max}$ (V)	6.3	



785nm P-I-V Graph



785nm Spectrum (SMSR>40dB)

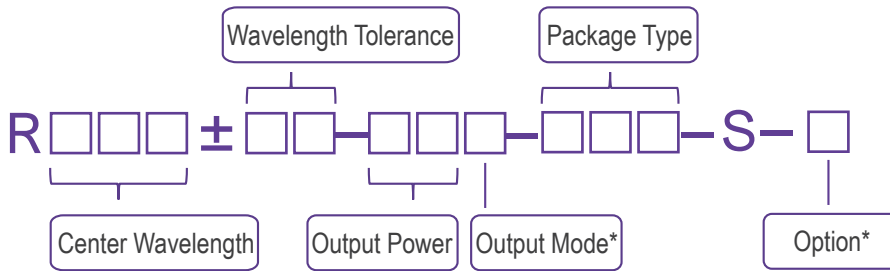
## Other Parameters

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.)

## Order Information

Package	Wavelength (nm)	Output Power (mW)	Part Number
14SBTF	785	100	R785±0.5-100mWW-14SBTF-S-TG
	1064	150	R1064±0.5-150mWW-14SBTF-S-TG

## Part Numbering Schema



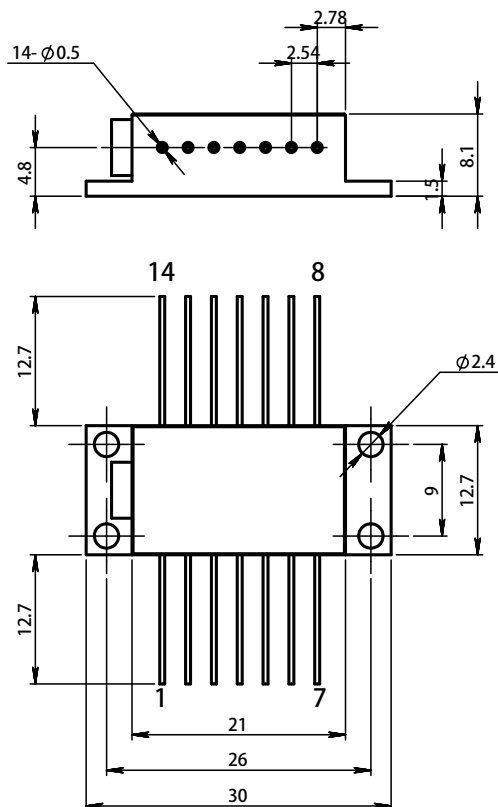
\*Output Mode: W - Free Space

\*Option: G - Narrow Linewidth

T - TEC

S - Single Mode

## Mechanical Drawings (in 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 (-)

