



**Electro Optical Components, Inc.**

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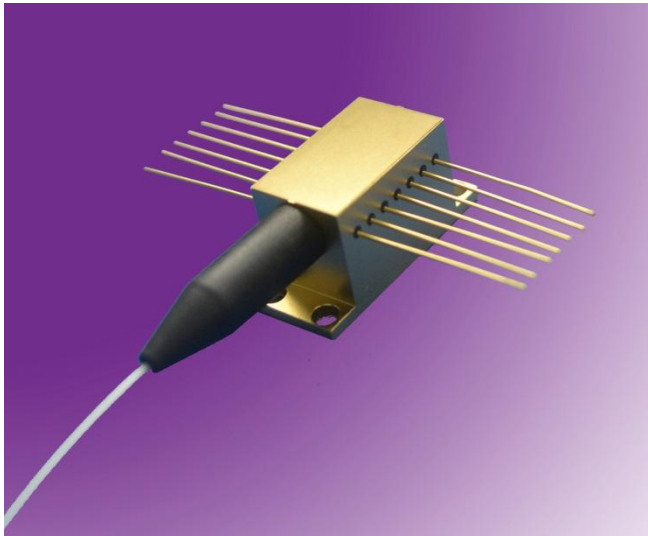
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## 635nm 500mW Laser Diode Module

R635±3-500mWF-14BTF-T



### Feature

Output power: 500mW

Wavelength: 635±3nm

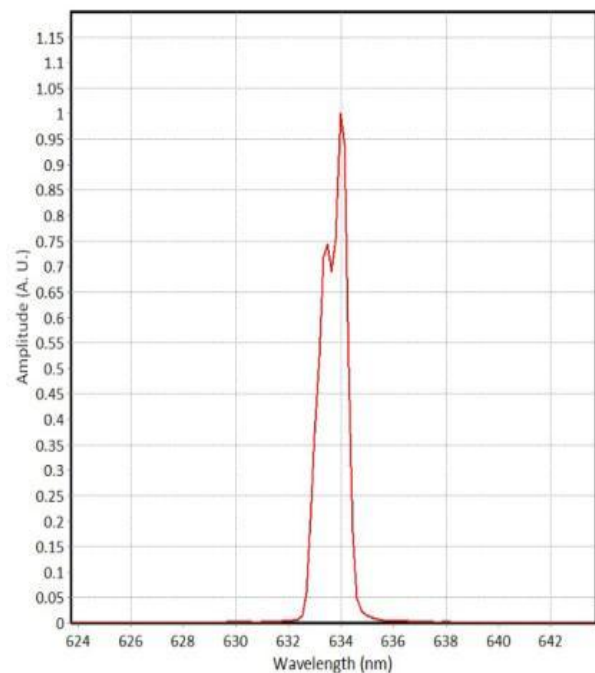
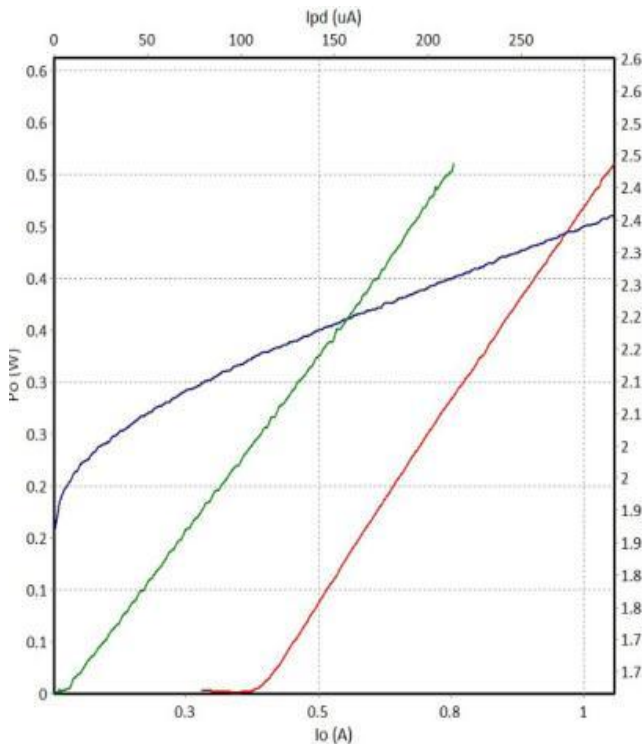
Fiber core: 200 μm, 0.22NA

### 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	$\lambda_c$	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 <sub>th</sub>	0.39	A
	Operating Current	I <sub>op</sub>	1.04	A
	Operating Voltage	V <sub>op</sub>	2.35	V
	Slope Efficiency	$\eta_{es}$	0.77	W/A
	PD Parameter	I <sub>pd</sub>	<2000	μA
	Thermistor	R <sub>t</sub>	10±5%/3450	kΩ/β(25°C)
	TEC max Current	I <sub>max</sub>	2.2	A
	TEC max Voltage	V <sub>max</sub>	8.7	V
Fiber	Fiber Core Diameter	d <sub>core</sub>	200	μm
	Fiber Clad Diameter	d <sub>clad</sub>	220	μm
	Fiber Buffer Diameter	d <sub>buffer</sub>	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(-)

