



Electro Optical Components, Inc.

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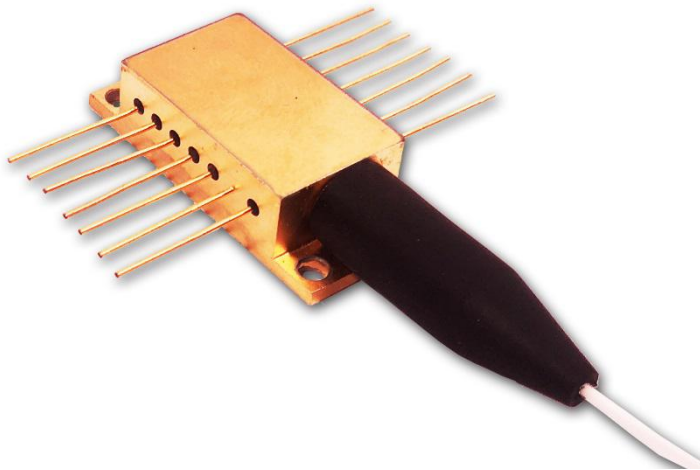
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785nm 600mW Laser Diode Module

R785±0.5-600mWF-14SBTF-TG



Feature

Output power: 600mW

Wavelength: 785±0.5nm

Fiber core: 105 μm, 0.22NA

Wavelength stability

Current range: 0.4~1.3A

Temperature range: 15~30°C

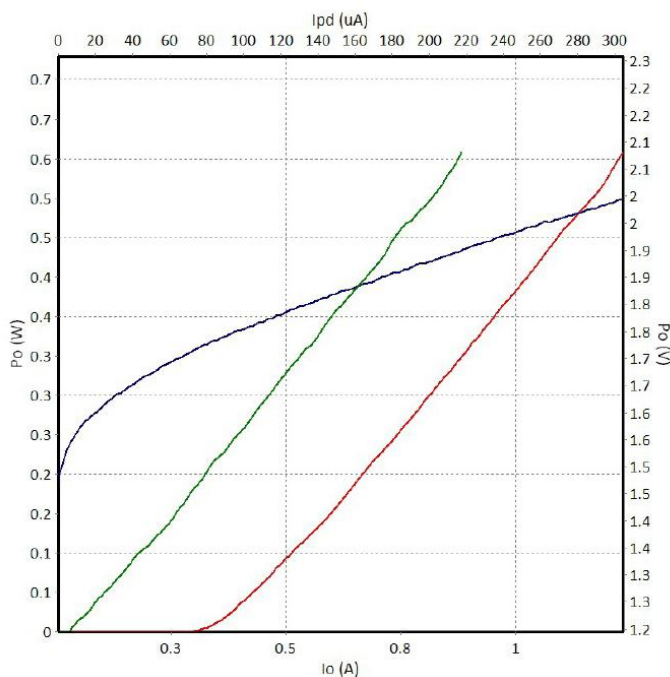
Application

Spectrum

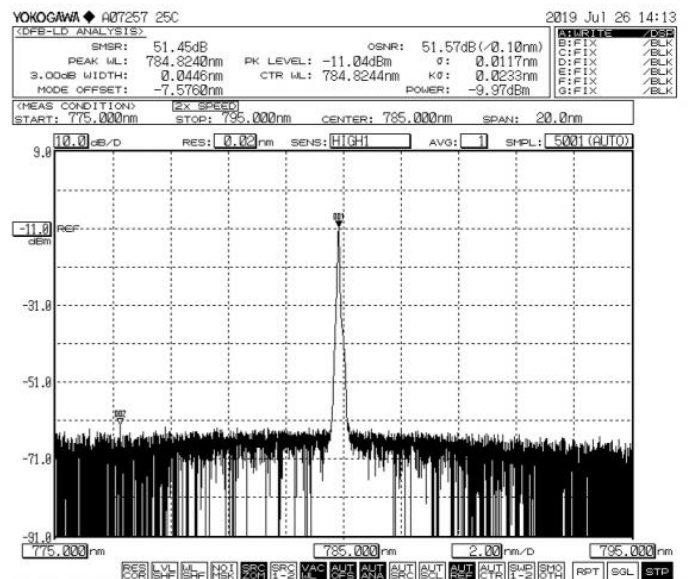
Sensing

Biology analysis

785nm 600mW Characteristics (25°C)



785nm P-I-V graph



785nm Laser spectrum

Typical Device Performance(25°C)

Parameter	Symbol	Typical Value		Unit
		R785±0.5-600mWF-14SBTF-TG		
Optical	CW Output Power	Pop	600	mW
	Center Wavelength	λ_c	785±0.5	nm
	Spectral Width	$\Delta\lambda$	≤0.1	nm
	Temperature drift of wavelength	$\Delta\lambda / \Delta T$	0.01	nm/°C
	Current drift of wavelength	$\Delta\lambda / \Delta I_{op}$	0.05	nm/A
Electrical	Threshold Current	I_{th}	0.36	A
	Operating Current	I_{op}	1.2	A
	Operating Voltage	V_{op}	2.3	V
	Slope Efficiency	η_{es}	0.7	W/A
	PD Parameter	I_{mo}	<2000	μA
	Thermistor	R_t	10±5%/3450	kΩ/β(25°C)
	TEC max Current	I_{max}	2.5	A
	TEC max Voltage	V_{max}	6.3	V
Fiber	Fiber Core Diameter	d_{core}	105	μm
	Numerical Aperture	NA	0.22	-
	Connector	-	SMA905,FC/PC	-

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(-)

