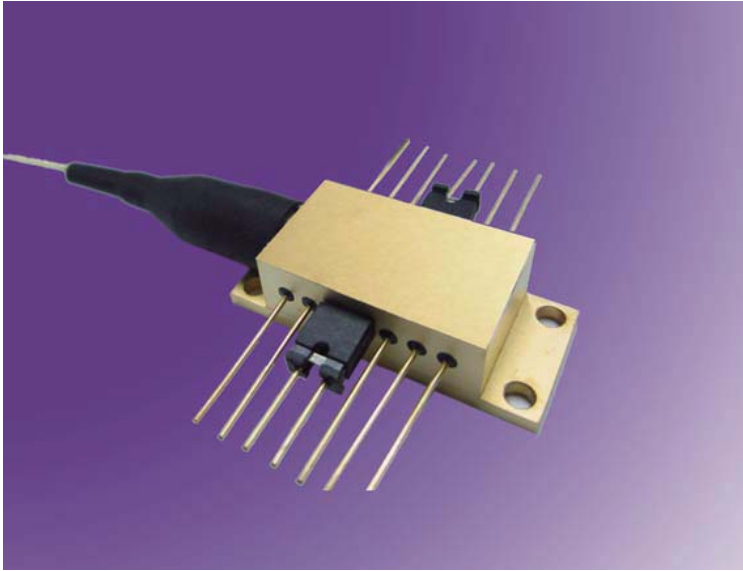


785nm 600mW wavelength-stabilized Laser Diode Module Functions: PD, TEC, Thermistor

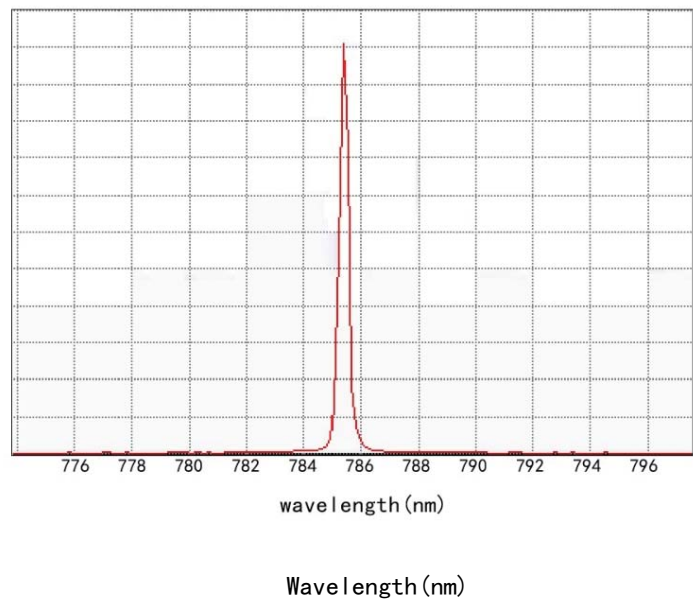
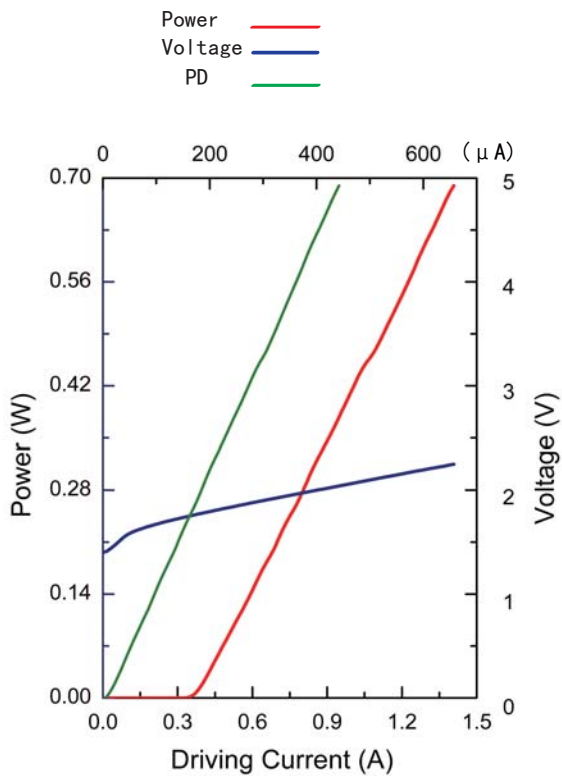
G785-600mWF-14BTF-TG



Features

output power:: 600mW
785±0.5nm wavelength locked
105µm core multimode optical fiber
0.22NA
current locking range: 0.3-1.4A
Temperature locking range: 15-35°C

785nm Characteristics (25°C)



Typical Device Performance (25°C)

Parameter	Symbol	Typical		Unit
		G785-600mWF-14BTF-TG		
Optical	CW Output Power	P_{op}	600	mW
	Center Wavelength	λ_c	785 ± 0.5	nm
	Spectral Width (90% of Power)	$\Delta \lambda$	≤ 0.3	nm
	Wavelength Shift with Temperature	$\Delta \lambda / \Delta T$	0.02	nm/°C
	Wavelength Shift with Current	$\Delta \lambda / \Delta I_{op}$	0.05	nm/A
Electrical	Threshold Current	I_{th}	0.36	A
	Operating Current	I_{op}	1.4	A
	Operating Voltage	V_{op}	2.3	V
	Slope Efficiency	η_{es}	0.6	W/A
Pilot beam	PD Parameter	I_{mo}	100~600	μA
	TEC max Current	I_{max}	2.2	A
	TEC max Voltage	V_{max}	8.7	V
	Thermistor	R_t	$10 \pm 5\% / 3477$	(K Ω) / β (25°C)
Fiber	Fiber Core Diameter	d_{core}	105	μm
	Fiber Cladding Diameter	d_{clad}	125	μm
	Fiber Buffer Diameter	d_{buffer}	250	μm
	Numerical Aperture	NA	0.22	-
	Fiber Length	-	SMA905	-

Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Temperature /°C	Lead Soldering Temperature, 10s max/ °C
Min	10	-20	-	-	10000
Max	30	80	90	250	-

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 (-)

