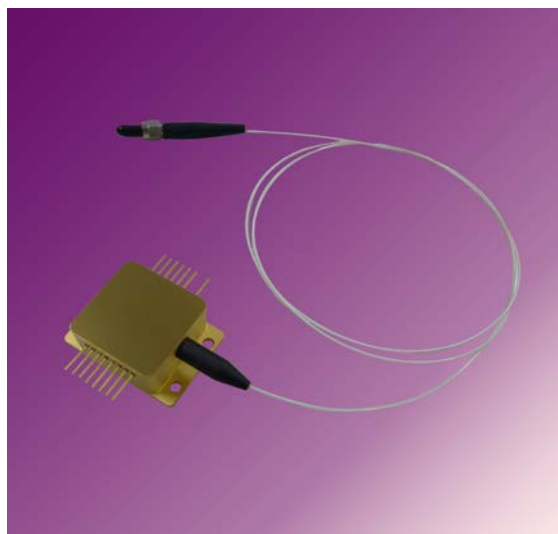




980nm 15-pin Laser Diode Modules

G980-10WF-15HHL-PT



Features:

Output Power: 10W

Wavelength: 976nm

Aiming Beam: 650nm

Fiber Core Diameter: 105/200/400µm

0.22NA

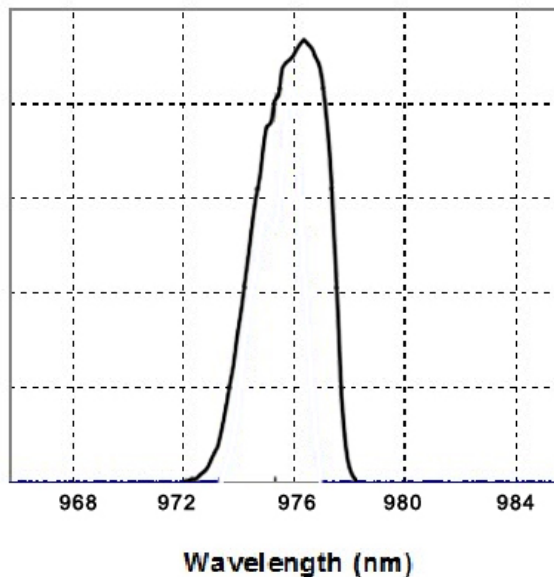
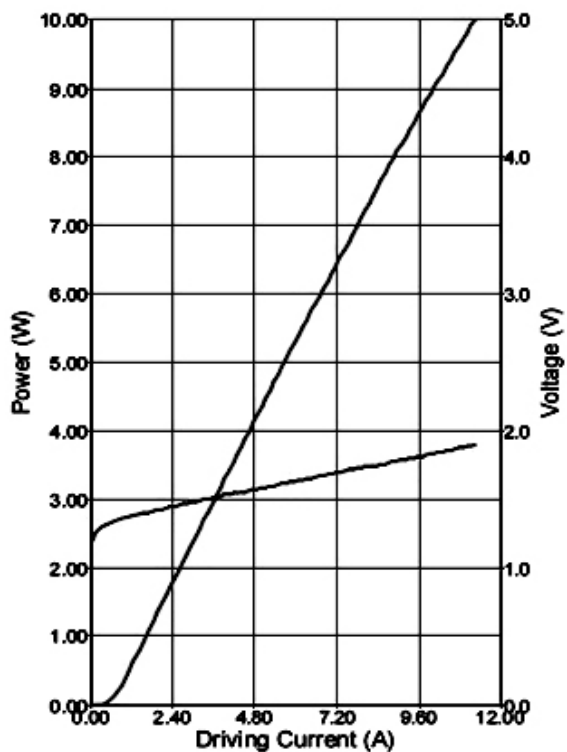
Applications

Medical Use

Laser Pumping

Material Processing

980nm Characteristics (25°C, 10W)



Typical Device Performance (25°C)

Parameter	Symbol	Typical Value		Unit
		G980-10WF-15HHL-PT		
Optical	CW Output Power	P_{op}	10	W
	Center Wavelength	λ_c	976±3, 976±10	nm
	Spectral Width (90% of Power)	$\Delta\lambda$	<3	nm
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	0.3	nm/°C
Pilot beam	Output Power	P_a	>2	mW
	Wavelength	λ_a	650±10	nm
	Voltage	V_a	2.2, 5.0	V
	Current	I_a	<30	mA
Electrical	Threshold Current	I_{th}	0.6	A
	Operating Current	I_{op}	12	A
	Operating Voltage	V_{op}	1.9	V
	Slope Efficiency	η_{es}	0.8-0.9	W / A
	PD	I_{mo}	0.2-2.0	mA
	TEC Max Current	I_t	6	A
	TEC Max Voltage	V_t	9.8	V
	Thermistor	R_t	10±5%/3477	(K Ω)/β(25 °C)
Fiber	Core Diameter	d_{core}	105,200,400	μm
	Numerical Aperture	NA	0.22	-
	Connector	-	ST, FC, SMA905	-

Other Parameters

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

Package Dimensions (mm)

Pin	Function	Pin	Function
1	Case	9	None
2	Laser (+)	10	None
3	Thermistor	11	None
4	Thermistor	12	None
5	Laser (-)	13	Aiming Beam (+)
6	PD (P)	14	Aiming Beam (-)
7	PD (N)	15	TEC (+)
8	TEC (-)		

