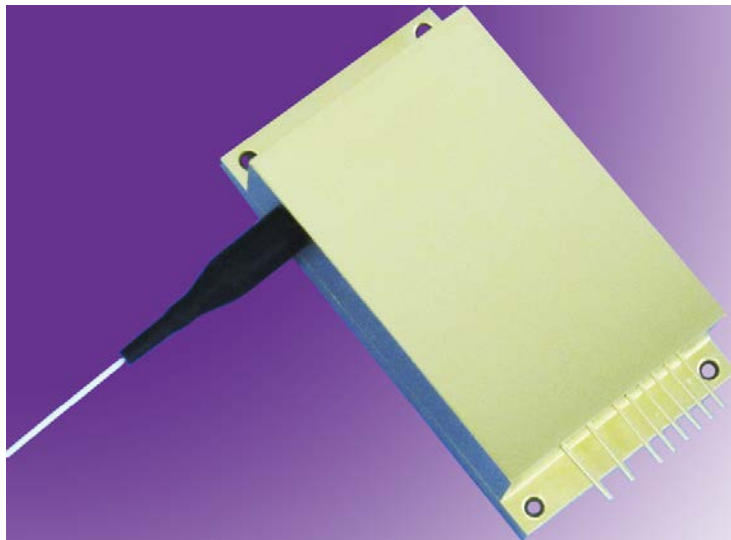




C-Series High Power Laser Diode Module

M9XX±10-70-F105/22-C1



Features:

High output Power: 70W

105µm core multimode optical fiber

0.22NA

Electrically isolated housing

Fiber laser feedback protection

915nm, 940nm and other 9XX wavelength optional

Application

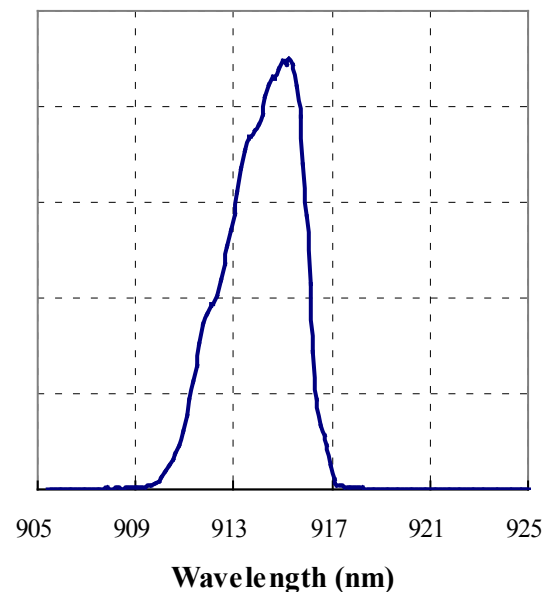
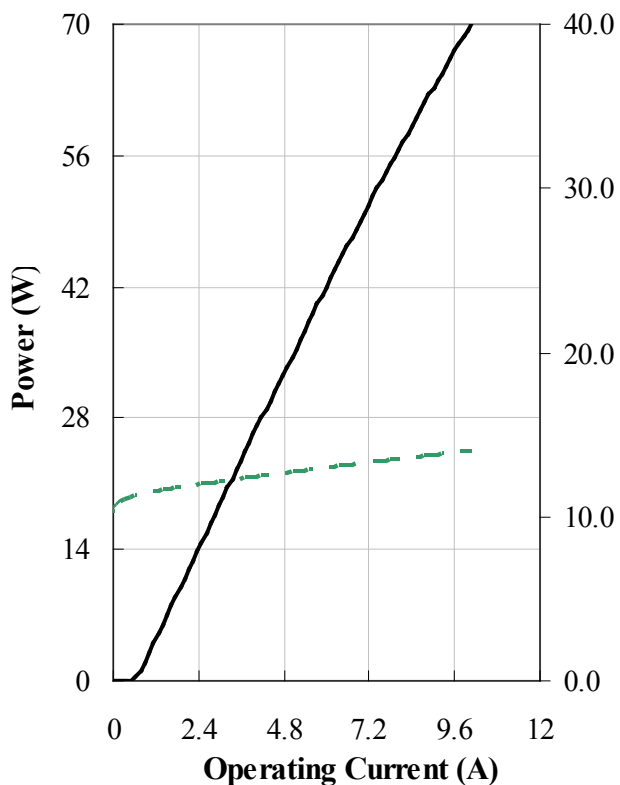
Laser pumping

Medical use

Material processing

915nm Characteristics (25°C, 70W)

— P-I Curve
- - - V-I Curve



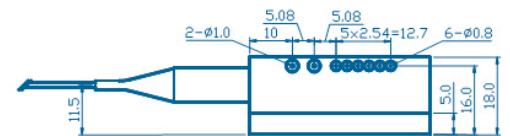
Typical Device Performance (25°C)

Parameter	Symbol	Typical		Unit
		M9XX±10-70-F105/22-C1		
Optical	CW Output Power	P_{op}	70	W
	Center Wavelength	λ_c	915, 940 Or other 9XX wavelength ±10	nm
	Spectral Width (90% of Power)	$\Delta\lambda$	<6.0	nm
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	0.35	nm/°C
	Feedback Protection(1030-1100nm)	FP	>40	dB
Electrical	Threshold Current	I_{th}	0.65	A
	Operating Current	I_{op}	10	A
	Operating Voltage	V_{op}	14	V
	Slope Efficiency	η_{es}	7.5	W / A
	Power Conversion Efficiency	η_{ep}	50	%
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	L	1.0	m

Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Humidity /%	Lead Soldering Temperature, 10s max/°C
Min	10	-	-20	-	-
Max	40	75	80	90	250

Package Dimensions (mm)



Pin	Function	Pin	Function
1	Laser(+)	5	Thermistor
2	Laser(-)	6	Thermistor
3	PD (N)	7	NA
4	PD (P)	8	NA

