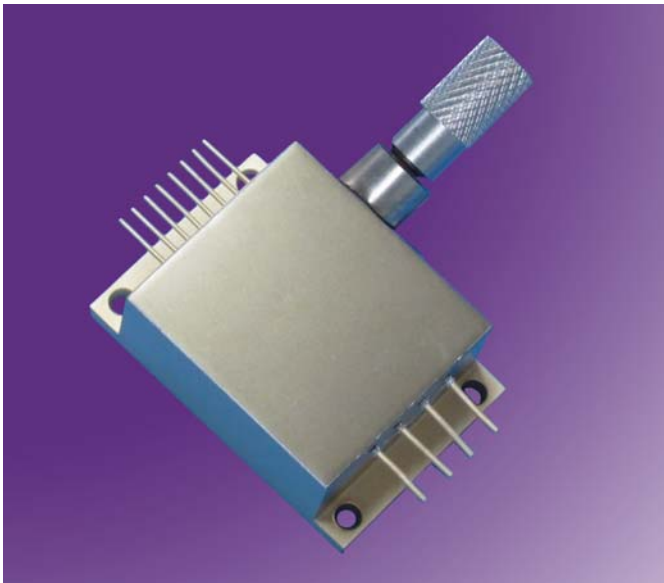


## 976nm 15W, 20W Detachable Laser Diode Module

Functions: PD, TEC, Thermistor, Aiming Beam, Fiber Detector

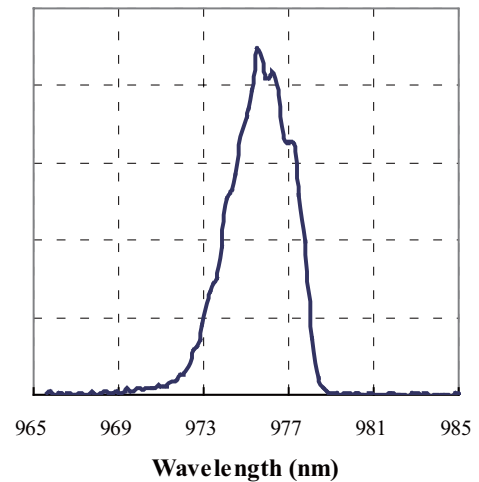
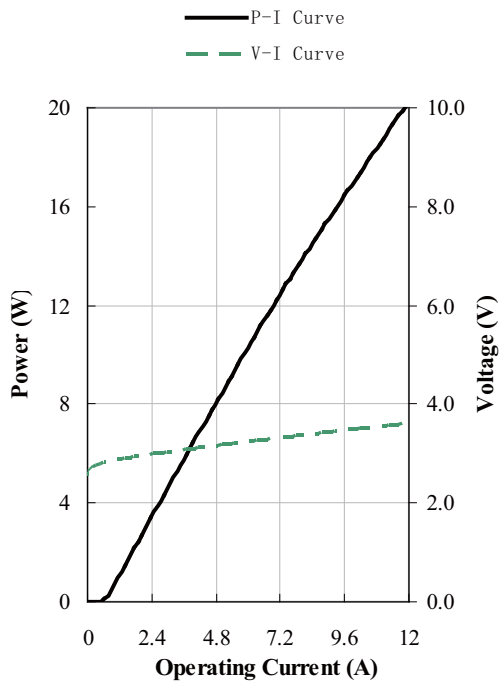
M976±10-15-D200/22-G4T-TAP

M976±10-20-D200/22-G4T-TAP



Features
Output power: 15W, 20W
Wavelength: 976±10(±3)nm, other 9XXnm wavelength optional
200 μm core multimode optical fiber (400 μm Optional)
0.22NA
Contains TEC
PD, TEC, Thermistor, Aiming Beam, Fiber Detector optional
Applications
Medical Use
Laser Pumping
Material Processing

### 976nm Characteristics (25°C)



## Typical Device Performance (25°C)

Parameter	Symbol	Typical		Unit	
		M976±10-15-D200/22-G4T-TAP	M976±10-20-D200/22-G4T-TAP		
Optical	CW Output Power	$P_{op}$	15	20	W
	Center Wavelength	$\lambda_c$	976±10 (±3 Optional)		nm
	Spectral Width (90% of Power)	$\Delta\lambda$	<6.0		nm
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	0.35		nm/°C
Pilot beam	Output Power	$P_a$	>2		mW
	Wavelength	$\lambda_a$	650±10		nm
	Voltage	$V_a$	2.2, 5.0		V
	Current	$I_a$	<30		mA
Electrical	Threshold Current	$I_{th}$	0.65		A
	Operating Current	$I_{op}$	10	9	A
	Operating Voltage	$V_{op}$	3.5	5.0	V
	Slope Efficiency	$\eta_{es}$	1.7	2.6	W/A
	Power Conversion Efficiency	$\eta_{ep}$	42	44.5	%
Fiber	Fiber Core Diameter	$d_{core}$	200		μm
	Fiber Cladding Diameter	$d_{clad}$	220		μm
	Fiber Buffer Diameter	$d_{buffer}$	500		μm
	Numerical Aperture	NA	0.22		-
	Connector	-	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	-	-
Max	40	75	80	90	250

## Package Dimensions (mm)

Pin	Function	Pin	Function
1	TEC(-)	6	Aiming Beam LD(+)
2	Laser (-)	7	Aiming Beam LD(-)
3	Laser (+)	8	PD (N)
4	TEC(+)	9	PD (P)
5	Fiber Detection PDP	10	Thermistor
6	Fiber Detection PDN	13	Thermistor

