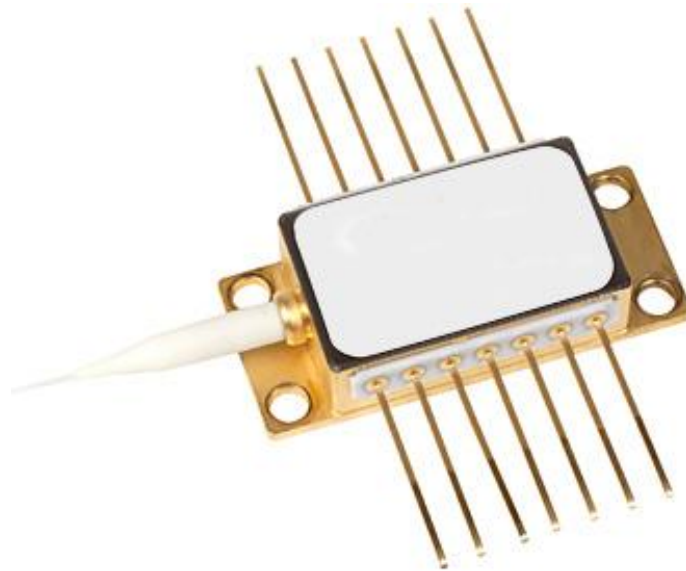


976nm 900mW SM Pumping Laser



- **Product Description**

Optional peak wavelength, optional output power, and optional FC/APC connector.

- **Product features**

Single-mode fiber output; high power stability; narrow linewidth characteristic; low noise design; industrial-grade package

- **Part Number**

MP-FP-976-900-14BF-SM



● General Parameters

Model Parameters

Parameter	Symbol	Min	Typ	Max	Unit
Center Wavelength	λ	974	976	980	nm
Spectral Width	$\Delta\lambda$	0.6	0.8	2.0	nm
Threshold Current	I_{th}	-	90	110	mA
Operating Current	I_{op}	-	120	150	mA
Fiber Output Power	P_f	400	600	1000	mW
Wavelength Tuning vs. Temperature	$\Delta\lambda/T$	-	-	0.01	nm/°C
Tracking Ratio ($0.1P_{op} < P_f < P_{op}$) ¹	TR	0.52	-	1.48	-
Tracking Error ²	TE	-48	-	48	-
PD Monitor Responsivity	IBF	0.5	-	5	$\mu\text{A}/\text{mW}$
Thermal Resistance ($T_{set} = 25^\circ\text{C}$) ³	R_{th}	-	20K	-	ohm
PD Dark Current ($V_{RD} = 5\text{V}$)	I_d	-	-	0.1	μA

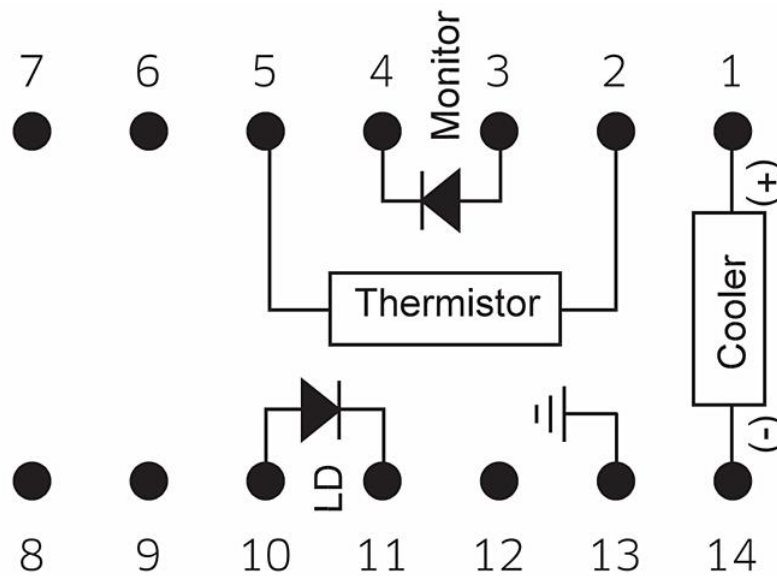


Extinction Ratio (PM Version)	PER	17	20	-	dB
Fiber Type	HI1060				
Forward Voltage	Vf	-	1.8	2.6	V
Thermistor Resistance	RT	9.5	10	10.5	kΩ
Thermistor Temperature Efficiency	-	-	-4.4	-	%/°C
Output Connector	-	-	None or FC/APC	-	-

HI1060 Fiber Characteristics & Tolerances

Parameter	Value
Cut-off Wavelength	920 nm
Maximum Attenuation	2.1 dB/km
Cladding Diameter	125 μm
Coating Diameter	250 μm
Core-Cladding Concentricity Error	≤ 0.5 μm
Mode Field Diameter	5.9 μm

Pin Definitions



Pin	Description	Pin	Description
1	Thermoelectric Cooler (+)	8	N/C
2	Thermistor	9	N/C
3	PD Monitor Anode (-)	10	Laser Anode (+)
4	PD Monitor Cathode (+)	11	Laser Cathode (-)
5	Thermistor	12	N/C
6	N/C	13	Case Ground
7	N/C	14	Thermoelectric Cooler (-)



Ordering Information

Peak Wavelength

973.0 to 975.0 nm

975.0 to 977.0 nm

973.0 to 981.5 nm

Maximum Operating Power

600 mW

620 mW

640 mW

660 mW

680 mW

700 mW

720 mW

740 mW

760 mW

780 mW

800 mW

820 mW

840 mW

860 mW

880 mW

900 mW

950 mW