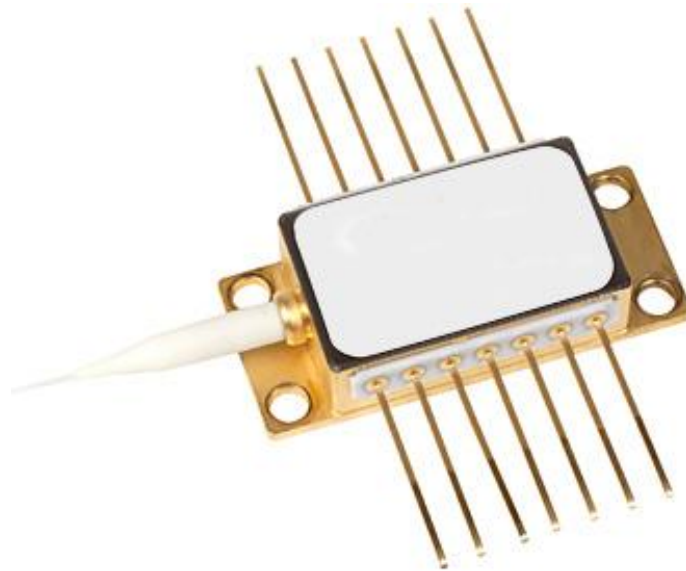


976nm 600mW SM Pumping Laser



- **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-976-600-14BF-SM



● Application area

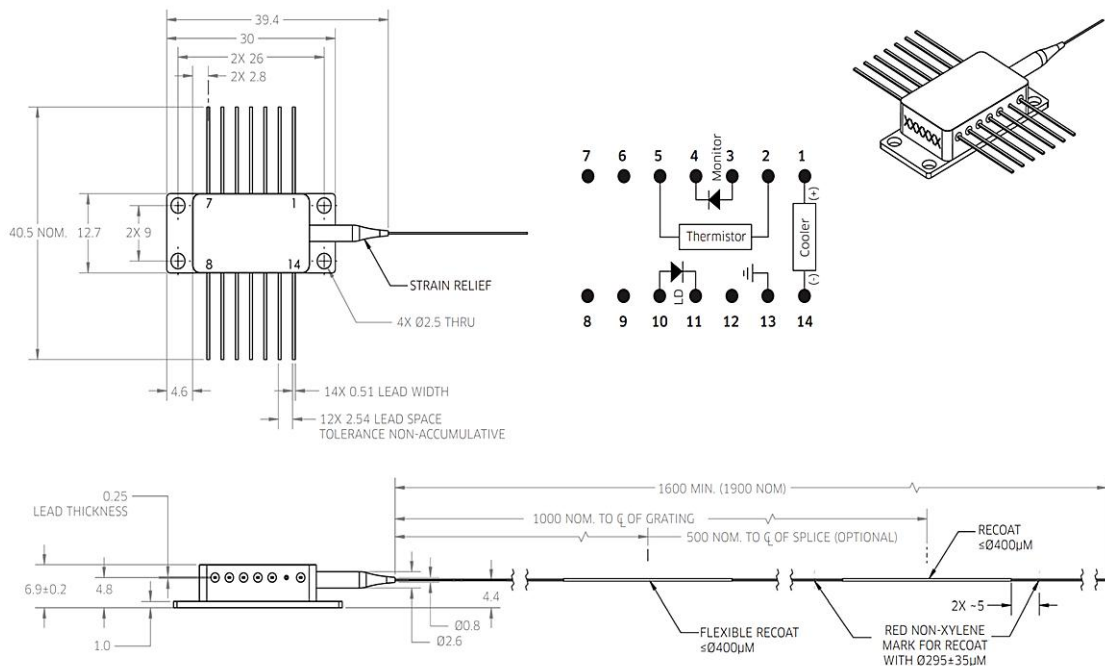
Fiber Amplifier Pumping | Fiber Lasers | Coherent Optical Communication |

Fiber Optic Sensing | Quantum Technology

● Core parameters

| Center Wavelength | Output Power |
|-------------------|--------------|
| 976nm | 600mW |

● Dimension Drawing





● General Parameters

Model Parameters

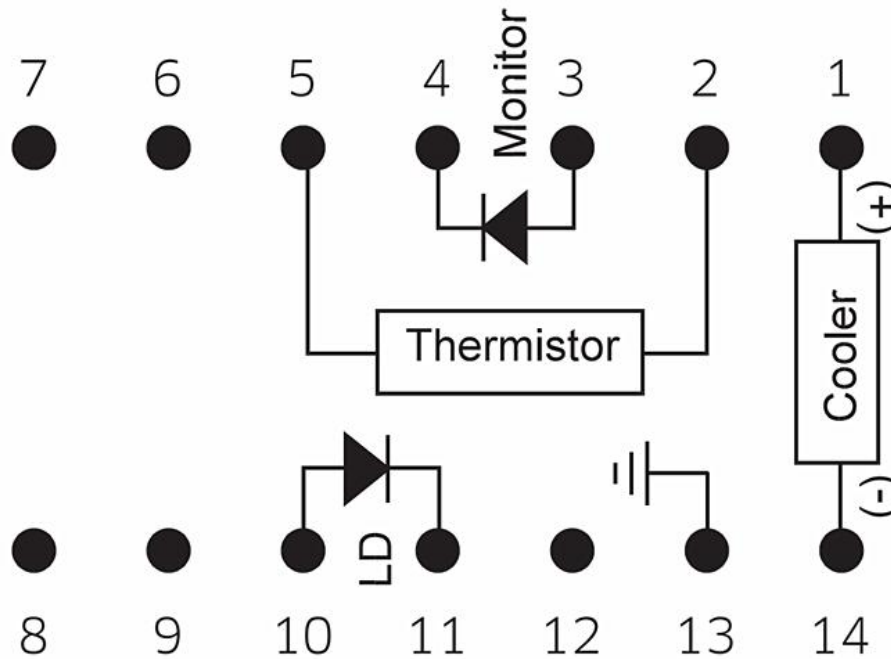
| Parameter | Symbol | Min | Typ | Max | Unit |
|---|-------------------|------|-----|------|---------------|
| Center Wavelength | λ | 974 | 976 | 980 | nm |
| Spectral Width | $\Delta\lambda$ | 0.6 | 0.8 | 2.0 | nm |
| Threshold Current | I_{th} | - | 90 | 110 | mA |
| Operating Current | I_{op} | - | 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 (0.1Pop < Pf < Pop) 1 | TR | 0.52 | - | 1.48 | - |
| Tracking Error ² | TE | -48 | - | 48 | - |
| PD Monitor Responsivity | IBF | 0.5 | - | 5 | μ A/mW |
| Thermal Resistance (Tset = 25°C) ³ | Rth | - | 20K | - | ohm |
| PD Dark Current (VRD = 5 V) | I_d | - | - | 0.1 | μ A |

| | | | | | |
|--|---------------|------------|-----------------------|-------------|-------------|
| 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