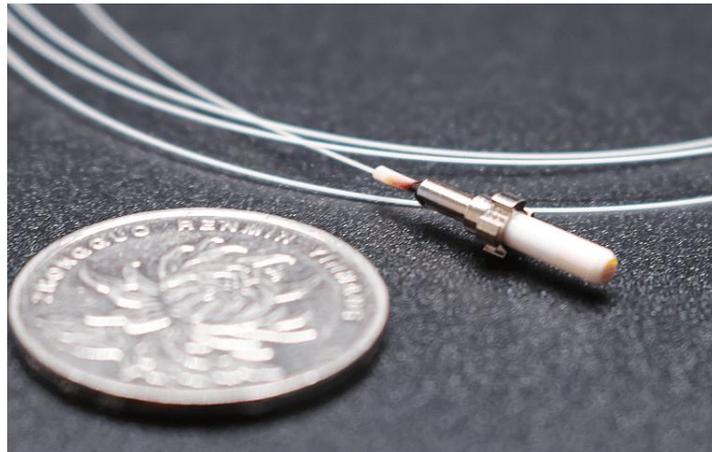


980nm Single Mode Fiber Reflector Mirror



- **Product Description**

An example of a fiber total reflector used in an erbium-doped fiber amplifier.

In this example, a fiber retroreflector is placed at the end of an erbium-doped fiber to reflect light back into the fiber in the direction of the incident light. A circulator is used to directly guide the input light and the amplified output light into their appropriate optical paths, so that the signal light can pass through the gain fiber twice, and the gain of the amplifier is absorbed and utilized more effectively. Another practical application of retroreflectors is to build adjustable retroreflectors, as shown in Figure 2.

The feedback signal from the downstream retroreflector can cause



instability in some devices, such as laser diodes. By using an adjustable retroreflector, the sensitivity of the device to retroreflection can be determined. The adjustable attenuator allows the user to introduce standard reflections into the device. By analyzing the retroreflection effect, the user can calculate the device's noise level, bit error rate, distortion and other parameters.

- **Product features**

Small temperature error、 High reflectivity、 High long-term reliability

- **Part Number**

MP-FRM-980-SA

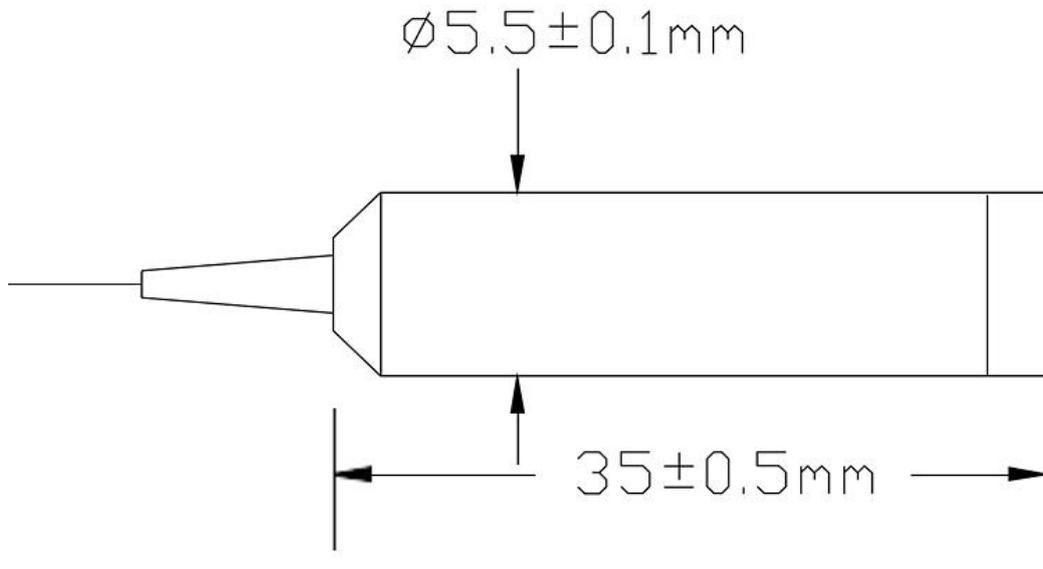
- **Application area**

Fiber optic current sensor、 Fiber optic network testing and analysis、 Fiber optic sensing

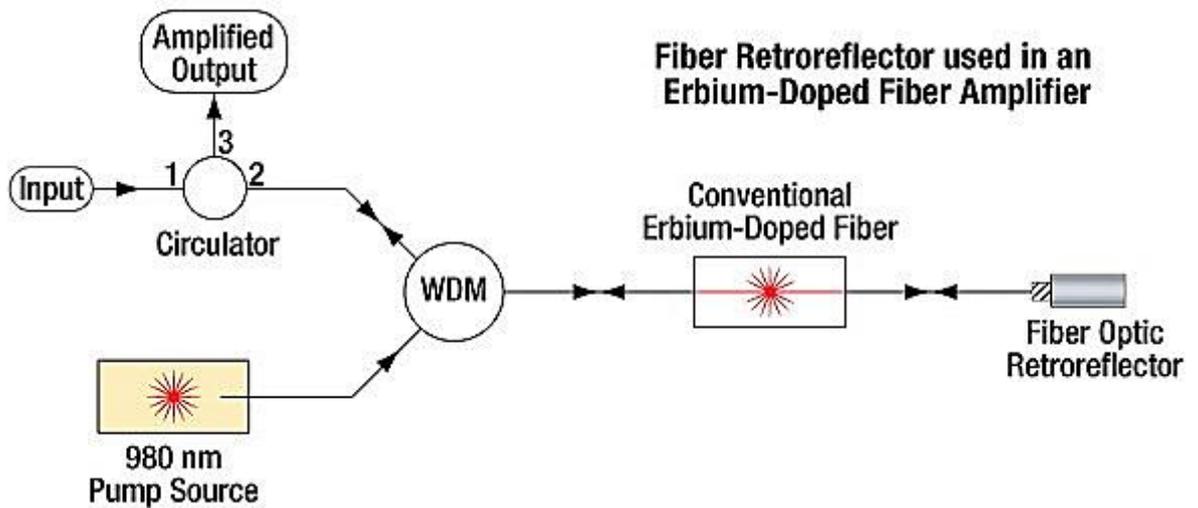
- **Core parameters**

| Wavelength | Reflectivity |
|------------|--------------|
| 980nm | >99.5% |

● **Dimension Drawing**



● **General Parameters**



All-fiber amplifier using retroreflectors and a circulator

Parameter

Test temperature @25°C

| Parameters | Unit | value |
|--------------------------------------|------|--------------------------|
| Operating wavelength (λ_c) | nm | 980/1060/1310/1550/2000 |
| Bandwidth | nm | ± 10 |
| Typical insertion loss | dB | 0.8 |
| Maximum insertion loss | dB | 1.0 |
| Reflectivity | % | >99.5 |
| Max. PDL at 23°C, λ_c | dB | 0.2 |
| Maximum operating power (CW) | mW | 300 |
| Maximum tensile force | N | 5 |
| Fiber type | | SMF-28e Fiber or Specify |
| Operating temperature | °C | -5 to +70 |
| Storage temperature | °C | -40 to +85 |

Ordering Information

MP-FRM-W□□□□-XX

W□□□□: operating wavelength

98: 980m

13: 1310m

15: 1550nm

20: 2000nm

XX: Fiber and connector type



SN=SMF-28E Fiber + None

SA=SMF-28E Fiber + FC/APC

SP=SMF-28E Fiber + FC/PC

PP=PM Fiber Fiber + FC/PC

PA=PM Fiber Fiber + FC/APC