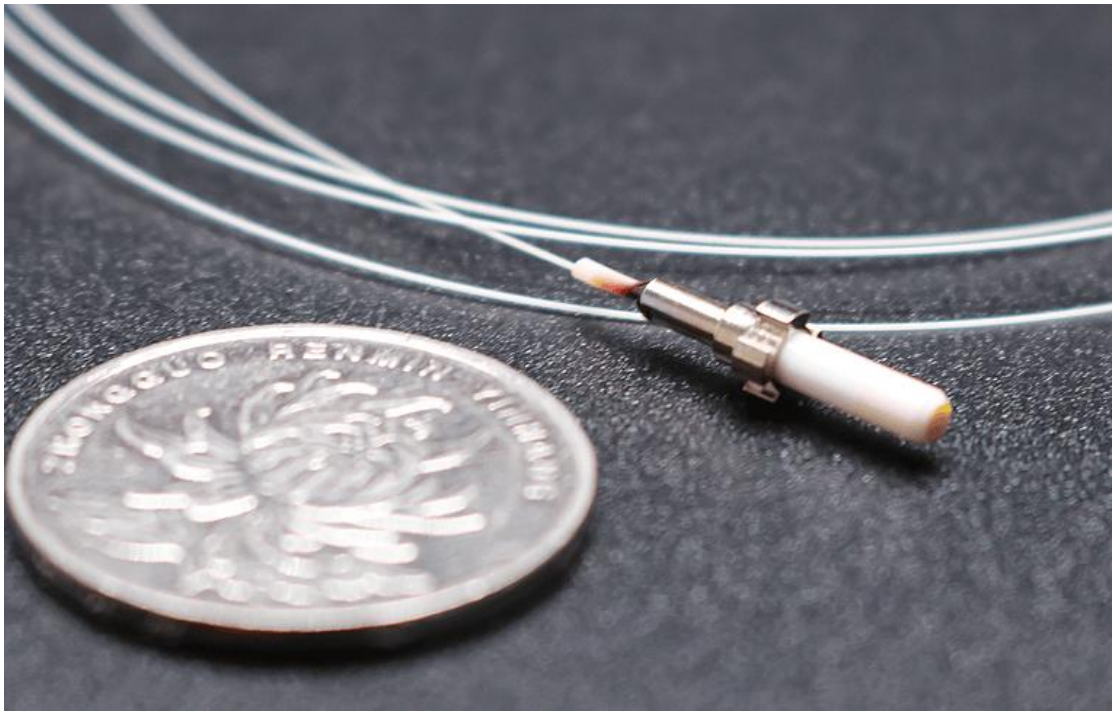
980nm Single Mode Fiber Reflector Mirror



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.

Part Number

FM-W98-SA

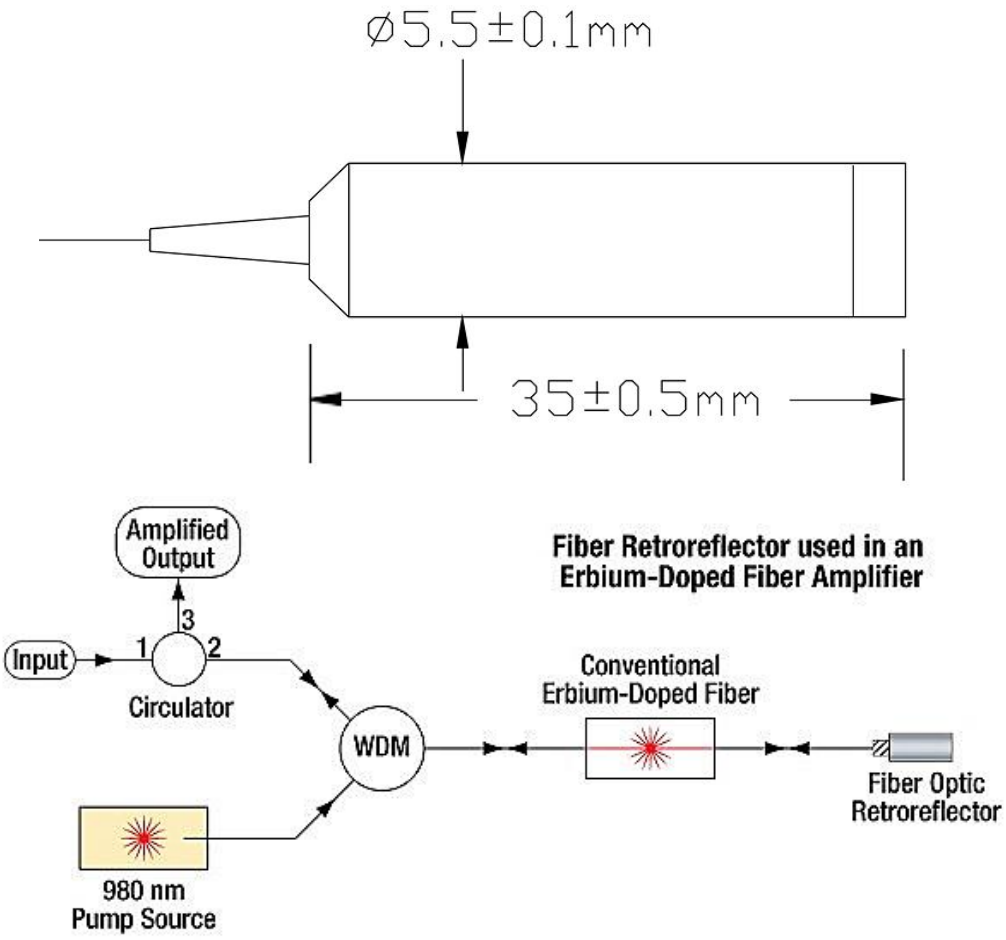
Product features

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

Application area

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

Dimensional Drawing



All-fiber amplifier using retroreflectors and a circulator

Parameters

Test temperature @25℃

Parameters	Unit	value
Operating wavelength (λc)	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℃, λc	dB	0.2
Maximum operating power (CW)	mW	300
Maximum tensile force	N	5
Fiber type		SMF-28e Fiber or Specify
Operating temperature	℃	-5 to +70
Storage temperature	℃	-40 to +85

Ordering Information

FM-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