980 nm Polarization Maintaining Fiber Optic Connector/Patch Cord

Product Description

These polarization-maintaining fiber optic patch cords feature high-quality, narrow-key ceramic FC/AFC connectors on both ends. Produced by our equipment, each patch cord is individually tested at the test wavelength specified in the specification label, ensuring extinction ratio and low back reflection (return loss) for both the fiber and its connections. These patch cords are in stock, featuring high-quality polishing to guarantee a typical return loss exceeding 60 dB. The test data sheet provides the extinction ratio and insertion loss test results for each patch cord. Each patch cord comes with two protective caps covering the ends to prevent dust or other contaminants from

settling on the ferrule end face. We also sell protective FC/PC end caps separately, including CAPF plastic fiber caps and CAPFM metal threaded fiber caps. If you cannot find a suitable product among our in-stock patch cords, Terahertzlabs also offers custom patch cords that can be shipped on the same day.

● Part Number

PM-980-2-1-FC/APC

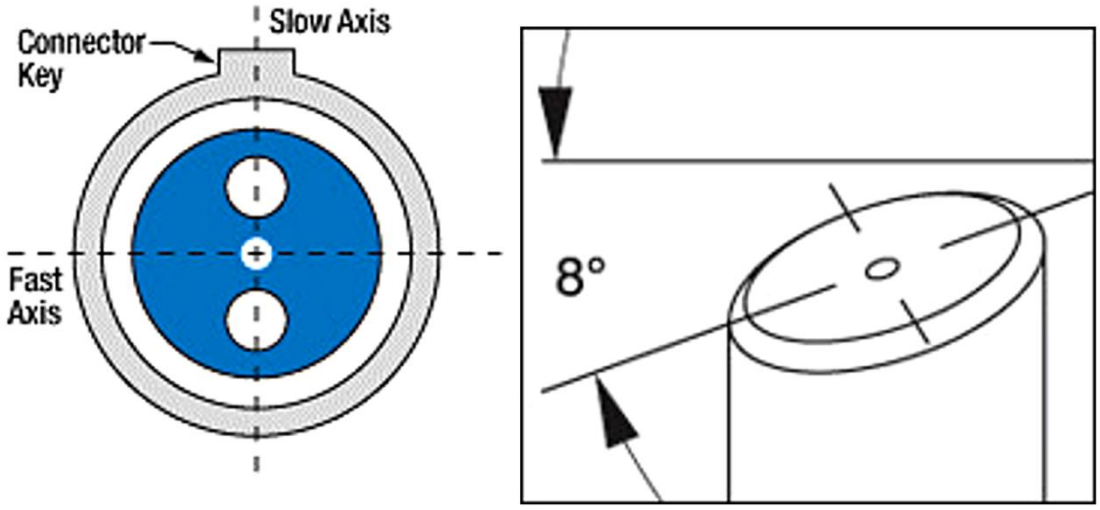
● Product features

Slow Axis Alignment、 Polarization-maintaining fiber with a pair of FC/APC connectors、 Wavelength range of 400-2200 nm、 Narrow key (2 mm) and slow axis alignment、 Typical 60 dB return loss、 Ceramic ferrule, 8° angle (APC)、 Ø3mm outer protective sleeve、 Custom patch cords available

● Application area

Fiber optic communication system、 Fiber optic access network、 Fiber optic data transmission、 Fiber optic CATV、 Local area network (LAN)、 Test equipment、 Fiber optic sensors

● Dimensional Drawing



Parameters

PN#	PM-405-2-1-FC /APC	PM-488-2-1-FC /APC	PM-630-2-1-FC /APC	PM-780-2-1-FC /APC	PM-980-2-1-FC /APC
Test wavelength	405 nm	488 nm	630 nm	780 nm	980 nm
Operating wavelength	400 - 680 nm	460 - 700 nm	620 - 850 nm	770 - 1100 nm	970 - 1550 nm
Cutoff wavelength	380 ± 20 nm	420 ± 30 nm	570 ± 50 nm	710 ± 60 nm	920 ± 50 nm
Fiber type	PM-S405-XP (Panda)	PM460-HP (Panda)	PM630-HP (Panda)	PM780-HP (Panda)	PM980-XP (Panda)
Maximum insertion loss	1.5 dB	1.5 dB	1.2 dB	1.0 dB	0.7 dB
Minimum extinction ratio	15 dB	18 dB	20 dB	20 dB	22 dB
Mode field diameter	3.6 ± 0.5 um @ 405nm	3.4 um @ 488nm	4.2 um @ 630nm	4.9 um @ 780nm	6.6 ± 0.7 um @ 980nm
Numerical aperture	0.12	0.12	0.12	0.12	0.12
Return loss	60 dB Typical				
Fiber optic connector	FC/APC				
Key width	2.00 ± 0.02 mm				
Alignment method	Narrow Key Aligned to Slow Axis				
Fiber length	1.0 +0.075/-0 m for Item NumbersEnding in -1				
	2.0 +0.075/-0 m for Item NumbersEnding in -2				
	5.0 +0.075/-0 m for Item NumbersEnding in -5				
	10.0 +0.075/-0 m for Item NumbersEnding in -10				
Loose tube type	900um/2mm/3mm loose tube optional				
Operating temperature	0 to 70 ℃				
Storage temperature	-45 to 85 ℃				

PN#	PM-1064-2-1-FC/APC	PM-1310-2-1-FC/APC	PM-1550-2-1-FC/APC	PM-2000-2-1-FC/APC
Test wavelength	1064 nm	1310 nm	1550 nm	2000 nm
Operating wavelength	970 - 1550 nm	1270 - 1625 nm	1440 - 1625 nm	1850 - 2200 nm
Cutoff wavelength	920 ±50 nm	1200 ±70 nm	1370 ±70 nm	1720 ±80 nm
Fiber type	PM980-XP(Panda)	PM1300-XP(Panda)	PM1550-XP(Panda)	PM2000(Panda)
Maximum insertion loss	0.7 dB	0.5 dB	0.5 dB	0.5 dB
Minimum extinction ratio	22 dB	23 dB	23 dB	23 dB
Mode field diameter	7.7 um@ 1064 nm	9.3 ±0.5 um @ 1300 nm	9.9 ±0.5 um @ 1550 nm	8.6 um @ 2000 nm
Numerical aperture	0.12	0.13	0.125	0.20
Return loss	60 dB Typical			
Fiber optic connector	FC/APC			
Key width	2.00 mm ±0.02			
Alignment method	Narrow Key Aligned to Slow Axis			
Fiber length	1.0 +0.075/-0 m for Item NumbersEnding in -1			
	2.0 +0.075/-0 m for Item NumbersEnding in -2			
	5.0 +0.075/-0 m for Item NumbersEnding in -5			
	10.0 +0.075/-0 m for Item NumbersEnding in -10			
Loose tube type	900um/2mm/3mm loose tube optional			
Operating temperature	0 to 70 ℃			
Storage temperature	-45 to 85℃			

Note:

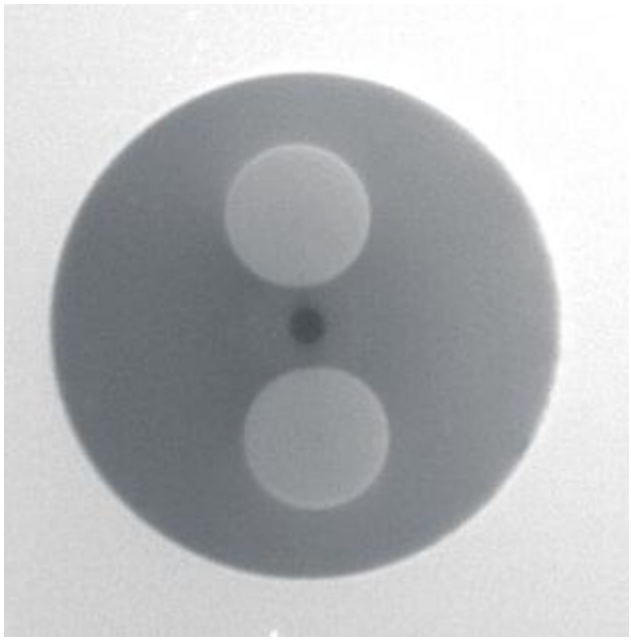
a. Measured at the test wavelength.

b. Mode field diameter (MFD) is a nominal value. The diameter at the $1/e^2$ power position in the near field.

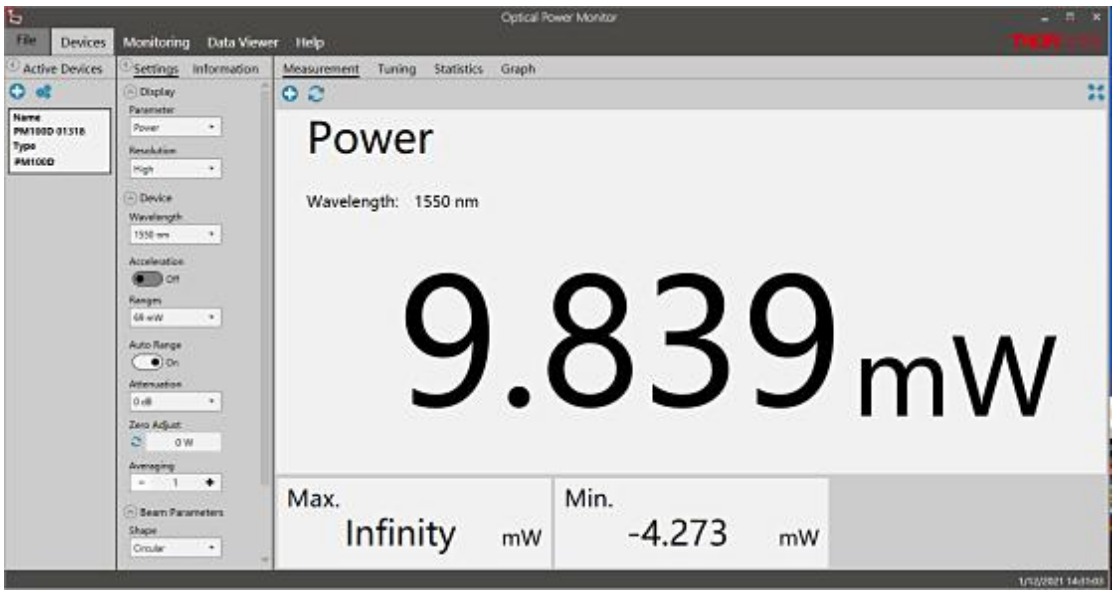
c. Numerical aperture (NA) is a nominal value.

1550PM Fiber Optic Patch Cord Experimental Test:

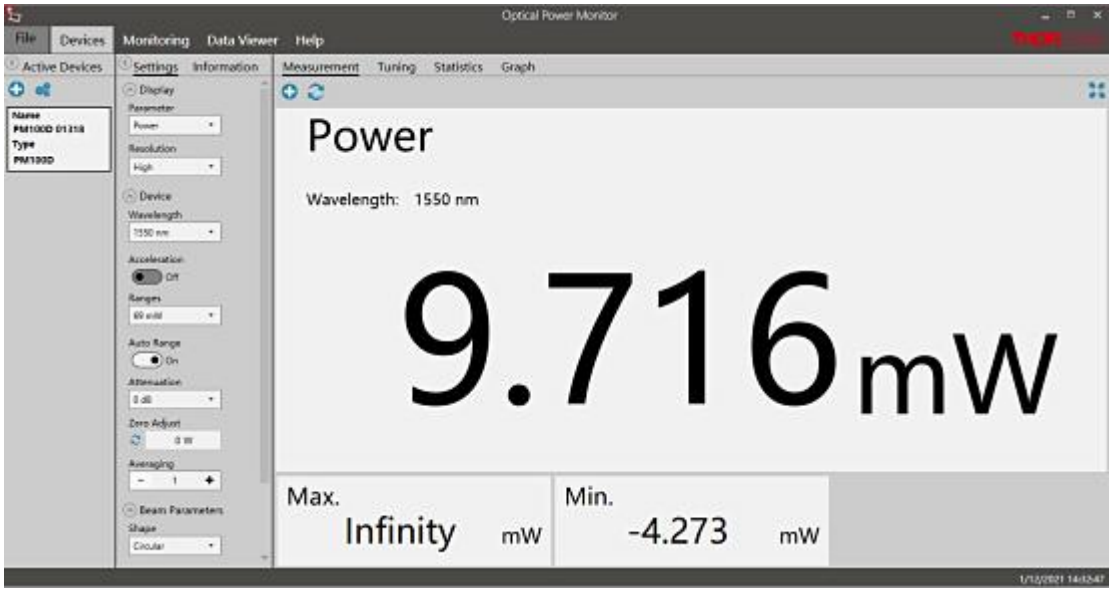
1.End-face inspection



2.IL Test

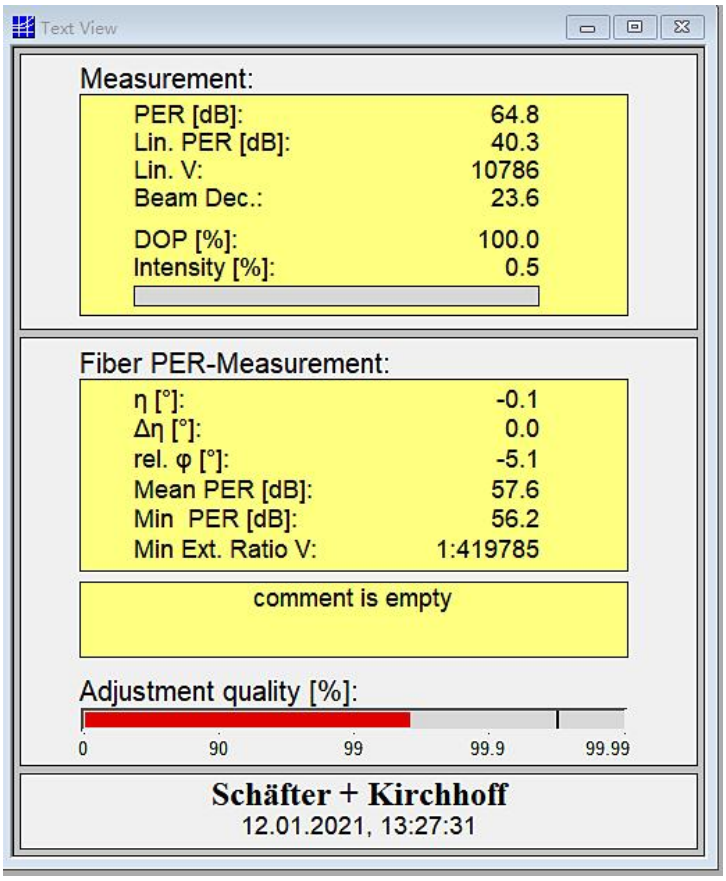


Laser power before connection

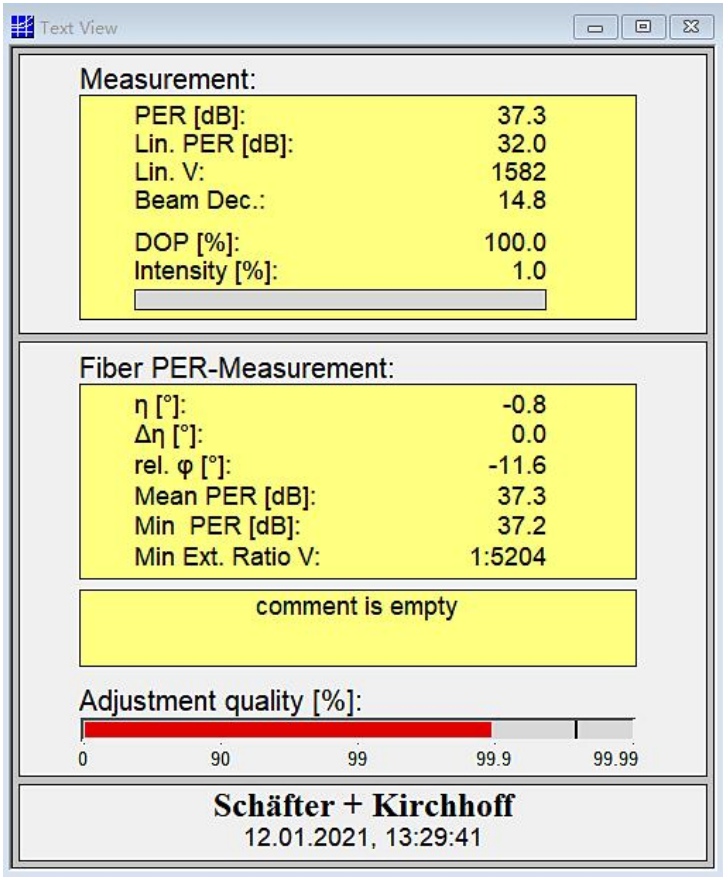


Power after connecting the fiber optic patch cord

Extinction Ratio Testing



Laser Direct Testing



After Connecting Optical Fiber Patch Cord