

4-Core FAN-OUT Optical Fiber Patch Cord Specification

1. Scope

This specification applies to optical fiber patch cords assembled by combining the optical fiber cords defined herein with optical connectors.

2. Product Code Description

Example: TFC-4C-SM-SC-SC-*m-F

Product Code	Item	Specification	
TFC		TFC	
4C	Cable Type	4C	4-core ribbon fiber
SM	Fiber Type	SM	Single-mode fiber
		OM1	Multi-mode fiber OM1 (62.5/125)
		OM2	Multi-mode fiber OM2 (50/125)
		OM3	Multi-mode fiber OM3
		OM4	Multi-mode fiber OM4
SC	Connector Type	SC	SC Connector
		LC	LC Connector
		ST	ST Connector
		FC	FC Connector
		MU	MU Connector
		OPEN	Unterminated
*m	Length		*m: Total length in meters (customer specified)
F		F	Fan-out type Other fields follow the same definition as Section 1.

3. Specifications (For specifications other than the standard specifications, please contact us.)

End-face polish	SM (Single-mode)	SPC	≥40dB
		UPC	≥50dB (Standard)
		APC	≥60dB
	MM (Multi-mode)	PC	≥25dB (Standard)
Cable Jacket	Color	SM	Yellow (Standard)
		OM1	Orange (Standard)
		OM2	Lime Green (Standard)
		OM3	Aqua (Standard)
		OM4	Aqua (Standard)

			Specified color
	Material	Flame-retardant PVC *UL1666 (OFNR) (Standard)	
		LSZH	
Cable outer diameter	Single-core	Φ2.00mm(standard)	
Strength member	Aramid yarn		
Allowable Bending Radius (mm)	≥ 40		
Maximum Allowable Side Pressure (N/100 mm ²)	≤ 500		
Maximum Allowable Tensile Load (N)	≤ 160		
Operating temperature	-20 to +70 °C		
Storage temperature	-40 to +80 °C		
Humidity	≤95% RH (non-condensing)		
Branch Length	0.5m (standard)		
	Specified length		

4. Structure and Optical Fiber Specifications

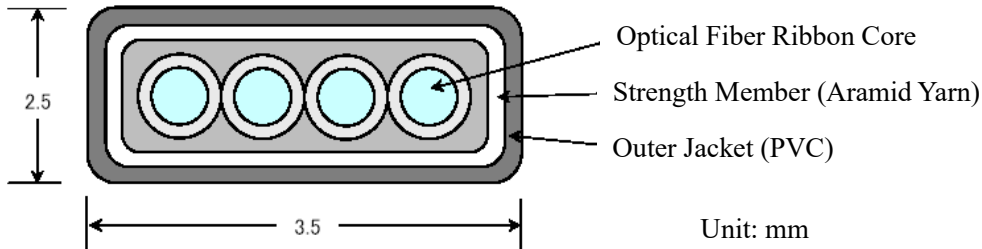
	SM		OM1		OM2		OM3		OM4	
Operating Wavelength (nm)	1310	1550	850	1300	850	1300	850	1300	850	1300
Attenuation (dB/km, max.)	0.32	0.18	2.9	0.6	2.3	0.6	2.3	0.6	2.3	0.6
Bandwidth (MHz·km)	-		200	500	700	500	1500	500	3500	500
Mode Field Diameter (μm)	9.2 ±0.4	10.4 ±0.5	-							
Core Diameter (μm)	-		62.5±2.5		50±2.5					
Cladding Diameter (μm)	125±0.7		125±1.0							
Coated Fiber Diameter (μm)	245±5									
Allowable Bending Radius (mm)	15mm/10turns ≤0.05dB @1310nm/1550nm		75mm/100turns ≤0.5dB @850nm/1300nm		15mm/2 turns ≤ 0.1dB@850nm ≤ 0.3dB@1300nm					
					7.5mm/2 turns ≤ 0.2dB@850nm ≤ 0.5dB@1300nm					

* SM, OM2, OM3 and OM4: R15 compliant.

5. Cable Construction

Outer Diameter (Ribbon Fiber Core: approx. 0.3 × 1.1 mm):

Model No.	Number of Cores	Outer Diameter (mm)
4FO	4	2.5 x 3.5



Tracer Color:

Fiber No.	1	2	3	4
SM 4-Core Ribbon	Blue	White	Brown	Gray
MM50/125 4-Core Ribbon	Blue	Orange	Green	Brown
MM50/125 OM3 4-Core Ribbon	Blue	Brown	Gray	Pink
MM50/125 OM4 4-Core Ribbon	Blue	Brown	Gray	Pink
MM62.5/125 4-Core Ribbon	Blue	Orange	Green	Pink

6. Packaging and Labeling

Each optical cable shall be individually packed in a plastic bag suitable for transportation and storage.

The following information shall be indicated on the plastic bag:

- Product name
- Manufacturing number
- Quantity, etc.

Attachments:

- Inspection data

7. Warranty

The warranty period for this product shall be one (1) year from the date of delivery.

In the event that a failure is found during normal use and is determined to be clearly attributable to a structural defect or manufacturing defect for which the manufacturer is responsible, the manufacturer shall replace the defective products free of charge, limited to the quantity of defective items and the sales amount thereof.

The warranty does not cover any indirect, incidental, or consequential damages arising from product removal, replacement, or use.

8. Specifications and configurations are subject to change without notice for performance improvement.