



Connector for Polymer Optical Fiber (POF*)

1 General

The FO-Connector style F-05 is optimized in particular for applications using standard 1mm polymer optical fiber demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics.

2 Application

Due to the good optical features and the easy cable assembly, the RP F-05 connector is useable in several applications:

- optical networking
- Industrial electronics
- Power electronics
- Consumer electronics



Pic. 1

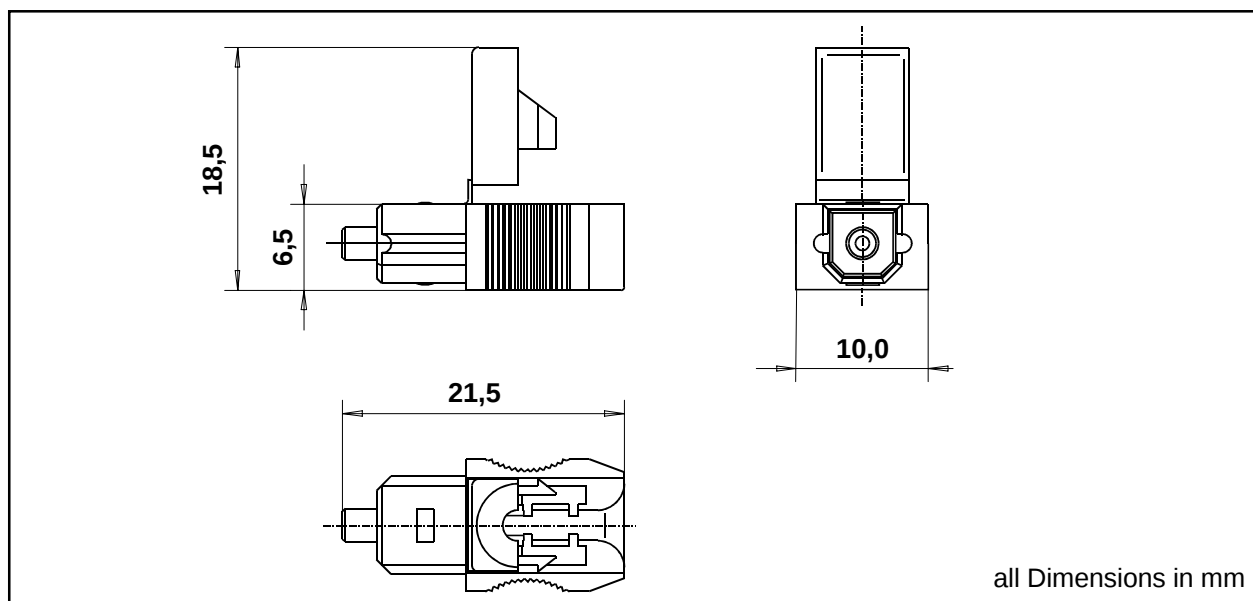
3 Ordering Information

Model	Part Number
RP F-05	902 SS 001 DL 001

4 Features

- single part full plastic connector
- compatible to `Japan`-standard
- useable with PA, PE, PVC jacketed POF-cable with 2,2mm outer diameter
- low insertion loss
- easy assembly

5 Technical Drawing



Pic. 2

*Polymer-Optical-Fiber

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6 Technical Data _____

Parameter	Condition	Value	Unit
Insertion loss	PA-jacket	0,6	dB
	PE-jacket	0,5	
	PVC-jacket	0,7	
Retention force of FO-cable	PA-jacket	110	N
	PE-jacket	60	
	PVC-jacket	35	
Insertion force into receptacle	TOTX /-RX module	14	N
Tensile force out of Receptacle	TOTX /-RX module	13	N
Press force for connector assembly	PA-jacket	195	N
	PE-jacket	175	
	PVC-jacket	155	
Temperature range	-	-40 to +85	°C

7 Cable Assembly _____

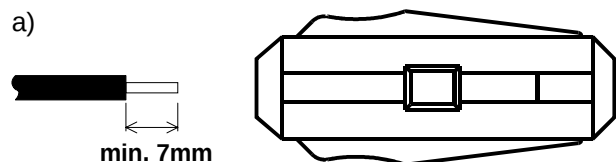
Used tools:

Fiber stripper _____ 910 AB 001 00 001

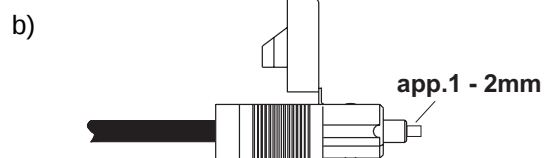
Polishing disc _____ 910 PS TOC 00 001

Polish film, grain size 1000 ____ 910 PB 001 00 001

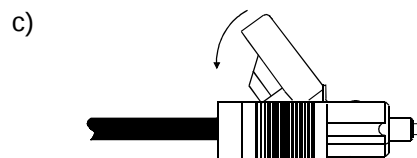
- a) Strip off app. 7mm of the outer jacket from the 2,2mm POF-cable with fiber stripper.



- b) Insert stripped POF-cable from backside into F-05 connector until mechanical stop reached. 1mm Polymer fiber should protrude the connector top by app.1 - 2mm.



- c) Turn down the latch cover and snap it into the connector body. When the latch cover snaps into the body with a hearable sound, proper connector-to-cable attachment is achieved.



- d) Insert the F-05 connector fully into the polishing disc with the fiber protruding from the bottom of the disc. Press the polishing disc down on the polish film and polish the fiber until the connector is flush with the bottom of the disc. Wipe the connector with a clean tissue. Best insertion loss results are achieved by wet grinding.

