

SFT-POF-01x02 Plastic Optical Fiber (POF) Splitter

Description:

Assembled from two branches of partially polished standard POF (1 mm POF, NA = 0.5) this optical power splitter component splits up the light of the input POF to two equal portions (50:50 symmetry) in the output branches. 2.2 mm outside diameter ferrules terminate the input and output ports. Coupling elements for the connection with standard POF cables are available.

For special applications a thin metal layer is deposited in the polished parts to increase the cross talk between both output branches. These low cross talk splitters are useful in sensor applications and data transmission systems that use one fiber only for bidirectional, full duplex operation.



Specifications:

type	splitting ratio (%) typical	excess loss (dB) min. typ. max.			cross talk (dB) typical
standard splitter	50 : 50 (± 20%)	0.6	1.3	2.5	22
low cross talk splitter	50 : 50 (± 20%)	0.8	1.2	1.5	50
standard splitter	10 : 90 (± 20%)	0.6	1.3	2.5	22
low cross talk splitter	10 : 90 (± 20%)	0.8	1.2	1.5	50

Customer specific modifications are feasible:

- unsymmetric splitters comprising an unsymmetry up to 75:25 splitting ratio,
- extension of the output fiber length up to 50 cm,
- bidirectional system test splitter modules.



Ordering Code:

SFT - POF - 01 x 02 - XX - XX - XX -XX-XX Cable type **Connectors** 09 0.9 POF Cable NC no connector 10 1.0 POF Cable SC SC-POF 12 1.2 POF Cable FC FC-POF 20 2.0 POF Cable ST ST-POF **Coupling ratio** Package option **Note:** standard fiber/cable length = 25 cm 50* 50/50 **PFS** POF fiber, standard tube * splitting ratio <u>+</u> 20% typical 10* 10/90 CM1 metal box 100x15x9 mm

Packaging variants:



SFT-POF-01x02-20-10-BFS-NC-NC SFT-POF-01x02-20-50-CM1-NC-NC