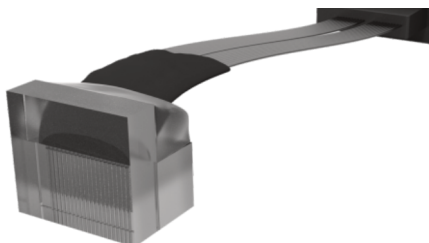




Low Profile Fiber Array (LPFA)

Fiber Array with Bent Output Fibers



SQS has developed and offers potential customers a very interesting fiber array with optical fibers outputting at an angle of 90° with a very small bending radius. The main advantage of this solution of fiber array with bent optical fibers is an achievement of a very low profile of the component. Low Profile Fiber Arrays (LPFA) may be used e.g. for mounting on a printed circuit board where it can be directly aligned to an optical transceiver or other optical components in the form of a semiconductor chip.

The SQS solution of LPFA (Low Profile Fiber Array) is based on the newly developed Bended Fiber Technology for bending fiber-array-output fibers up to 90° while maintaining minimal dimensions.

Because of the initial request of low profile fiber array, the solution was very demanding. The great success of SQS is that, despite the extremely adverse conditions for the transmission of the optical signal, the Low Profile Fiber Array with optical fibers outputting at an angle of 90° achieves very good transmission parameters.

LPFA Optical Specification

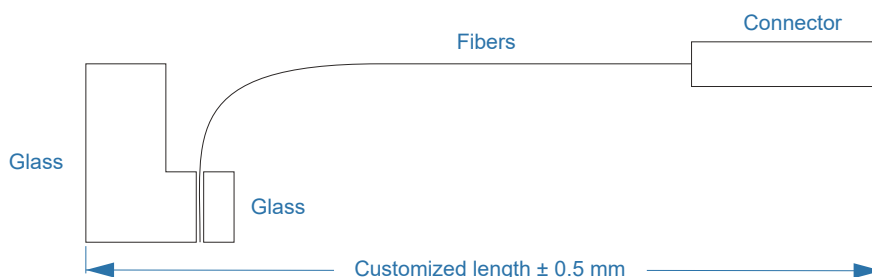
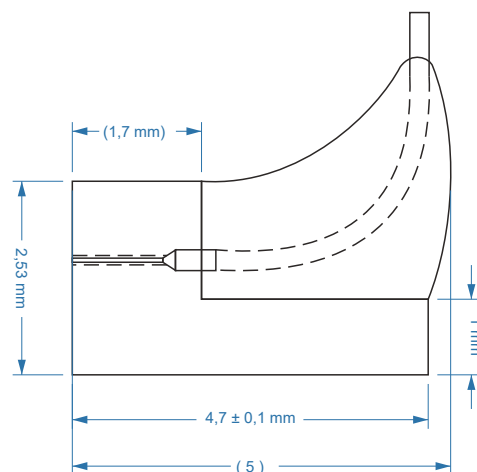
Parameters	Unit	Value	Note
Fiber type		G.657.B3	2+24 channels
Fiber dimensions	μm	9/125/250	
Total insertion loss @1310 & 1550 nm	dB	≤1	typically value 0,5 dB
Return loss	dB	≥55	

LPFA Mechanical Specification

Parameters	Unit	Value	Note
Length	mm	custom	±0,5
Height*	mm	max. 4÷5	
Polishing angle of FA	degree	8	±0,5
Pitch	μm	250	±0,5
Connectors		MT, LC, FC, ST, other	

* Depends on number of channels

Drawing



Low Profile Fiber Array

