Multi Mode Fiber FBT Coupler

Multi Mode Fiber FBT coupler is to bundle two or more optical fibers together, and then melt drawing on the cone drawing machine, and monitor the change of the splitting ratio in real time. After the splitting ratio reaches the requirement, the melt drawing ends, and one end of The root fiber (the rest is cut off) is used as the input end, and the other end is used as the multiple output end. At present, the mature cone drawing process can only pull below 1 × 4 at a time. For devices above 1 × 4, multiple 1 × 2 are connected together. It is then packaged in a splitter box.

The Main Advantage

(1) The FBT coupler has more than 20 years of history and experience. Many equipment and processes only need to be followed. The development cost is only one tenth or even one hundredth of the PLC.

(2) The raw materials are only readily available quartz substrates, optical fibers, heat shrinkable tubes, stainless steel tubes and less glue, and the total is not more than one dollar. And the depreciation cost of investment in machines and instruments is less, 1 × 2, 1 × 4 The low-channel splitter has a low cost. A

(3) The split ratio can be monitored in real time as needed, and unequal splitters can be made.

Features

Low additional loss

Low polarization-dependent loss

Good stability

Double working window

Three working windows

High wavelength isolation

Small size

Optional split ratio

Application fields of fusion taper beam splitter:

Optical fiber communication system

Fiber optic LAN

CATV

FTTH

Fiber Optic Sensor

measuring instrument

Package Size

(¢ × L) mm ¢ 3.0 × 54 ¢ 3.0 × 70 90 × 14 × 8.5

Housing Stainless steel (round) Stainless steel (round) Small module

Note: can also be packaged according to customer specifications

Performance

Rank

Parameter P level A level

Working wavelength (nm) 1310, 1550 or other

Working bandwidth (nm) ± 15

Typical additional loss (dB) ≦ 0.10 ≦ 0.15

Insertion loss (dB) 50/50 ≦ 3.4 ≦ 3.6

40/60 ≦ 4.4 / 2.6 ≦ 4.7 / 2.8

30/70 ≦ 5.7 / 1.9 ≦ 6.0 / 2.0

20/80 ≦ 7.6 / 1.2 ≦ 8.0 / 1.3

10/90 ≦ 11.0 / 0.65 ≦ 11.5 / 0.8

5/95 ≦ 14.2 / 0.4 ≦ 14.8 / 0.5

2/98 ≦ 18.5 / 0.25 ≦ 19.0 / 0.35

1/99 ≦ 21.5 / 0.2 ≦ 22.0 / 0.3

Polarization dependent loss (dB) ≦ 0.10 ≦ 0.15

Directivity (dB) ≧ 55

Working temperature (℃) -20 ～ + 70

Note: Can be customized according to customer specifications

The upper limit of the additional loss is as follows:

Number of branches 2345678910111216

Additional loss 0.20.30.40.450.50.550.60.70.80.91.01.2

Determine the spectral ratio, accurate to one decimal place, such as 82.3%.

Contrast And Summary Of Main Parameters Of Taper Type And Optical Waveguide

These two devices have their own advantages in terms of performance and price, and both process technologies are constantly being upgraded to overcome their shortcomings. The taper splitter is solving the problems of small number of disposable tapers and poor uniformity; the optical waveguide splitter is also making unremitting efforts to reduce costs. At present, the cost of the two devices above 1X8 is almost the same. The increase of the shunt channel is more cost-effective. 2. How to choose the device How to choose these two devices, the key is to consider from the occasion of use and user needs. In some applications where volume and light wavelength are not very sensitive, especially in the case of few splits, it is more cost-effective to choose a taper type optical splitter. For example, 1310nm taper type splitter is used for independent data transmission. Choose a 1550nm taper splitter; in the case of triple-play, FTTH, etc., which requires multiple wavelengths of optical transmission and more users, an optical waveguide splitter should be used. At present, most domestic companies use traction tap shunts for FTTH test networks. This is because many designers are not familiar with PLC devices, and few companies in China produce such devices. Almost all of the markets where FTTH in Japan and the United States operate in real business use planar optical waveguide splitters.

Certification:

CE CPR ISO RoHS

Factory Workshop:


Shenzhen Optico Communication Co.,Ltd