

Mode Field Adaptor (MFA) - Backward version

Description

This 1×1 Mode Field Adaptor is designed for high power fiber laser application.

It connects two different fibers with different NA and core diameter, as well as cladding, to keep mode field diameter matched with low fundamental mode signal loss and minimal degradation of beam quality (M^2).

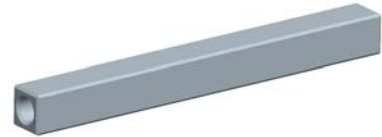
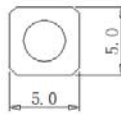
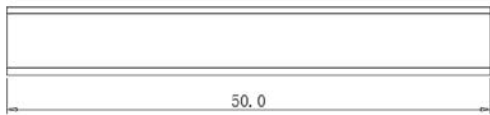
Fiber types can be customized.

Key Features

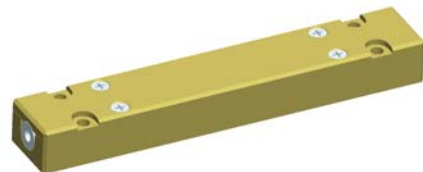
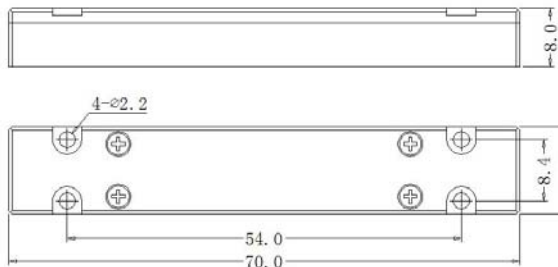
- High Signal Transfer Efficiency
- Low Degradation of Beam Quality
- Wide Wavelength Range Applicable
- Customized Configurations Available

Mechanical Dimension

C1: 50x5x5mm



C4: 70x12x8mm



Specifications

Item	Signal Input Fiber	Signal Output Fiber	Signal Insertion Loss (dB)*
1	10/125 DCF or SCF, 0.08NA	HI1060 or 6/125 DCF, 0.14NA	=<0.5
	15/125 DCF or SCF, 0.08NA		=<0.7
	20/125 DCF or SCF, 0.08NA		=<0.7
	20/400 DCF or SCF, 0.06NA		=<0.7
2	15/125 DCF, 0.08NA	10/125 DCF, 0.08NA	=<0.7
	20/125 DCF, 0.08NA		=<0.7
	25/250 DCF, 0.06NA		=<0.7
	30/250 DCF, 0.06NA		=<0.7
3	10/125 PM DCF or SCF	SM98-PR-U25A (PM)**	=<0.5
	20/125 PM DCF or SCF		=<0.7

* The signal loss means the fundamental mode signal loss; ** ER≥18dB for PM fiber MFA.

Item	Parameters/Test conditions	Min	Typ	Max	Unit	Note
1	Output Beam M ²			1.3	-	
2	Fiber Length	0.8			m	Each port
3	Operating Environment Temperature	-5		+70	°C	
4	Operating Humidity	5		95	%RH	Not recommended under high humidity.
5	Storage Temperature	-40		+85	°C	
6	Package	C1, C4			-	Refer to drawing.

Note: For backward version, handling power depends on mode distribution in input fiber.

High order modes are forbidden.

Ordering Information

MFA-1×1-B-Signal wavelength-Input signal fiber/Output signal fiber-Package-Fiber length

Input signal fiber/Output signal fiber: refer to fiber codes.

Package: C1, C4