

Mode Field Adaptor (MFA) - Forward 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).

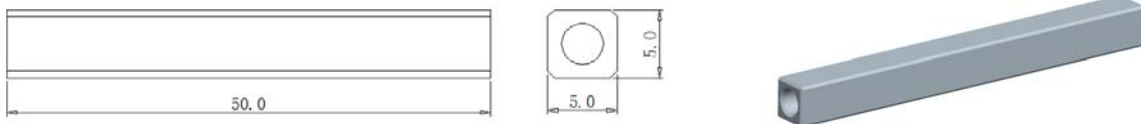
Fiber types can be customized.

Key Features

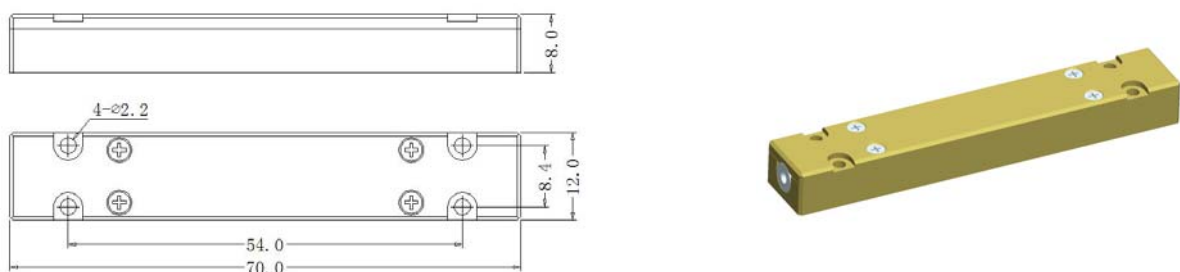
- High Signal Transfer Efficiency
- Low Degradation of Beam Quality
- High Power Operation
- Wide Wavelength Range Applicable
- Customized Configurations Available

Mechanical Dimension

C1: 50x5x5mm



C4: 70x12x8mm



Specifications

| Item | Signal Input Fiber | Signal Output Fiber | Signal Insertion Loss (dB)* |
|------|-----------------------------|---------------------------|-----------------------------|
| 1 | HI1060 or 6/125 DCF, 0.14NA | 10/125 DCF or SCF, 0.08NA | =<0.3 |
| | | 15/125 DCF or SCF, 0.08NA | =<0.3 |
| | | 20/125 DCF or SCF, 0.08NA | =<0.5 |
| | | 25/250 DCF or SCF, 0.06NA | =<0.5 |
| | | 30/250 DCF or SCF, 0.06NA | =<0.5 |
| | | 20/400 DCF or SCF, 0.06NA | =<0.5 |
| 2 | 10/125 DCF, 0.08NA | 20/125 DCF, 0.08NA | =<0.5 |
| | | 25/250 DCF, 0.06NA | =<0.5 |
| 3 | 15/125 DCF or SCF, 0.08NA | 20/125 DCF or SCF, 0.08NA | =<0.5 |
| | | 25/250 DCF or SCF, 0.06NA | =<0.5 |
| 4 | 20/125 DCF or SCF, 0.08NA | 20/400 DCF or SCF, 0.06NA | =<0.3 |
| 5 | 20/400 DCF or SCF, 0.06NA | 25/400 DCF or SCF, 0.06NA | =<0.3 |
| 6 | SM98-PR-U25A (PM)** | 10/125 PM DCF or SCF | =<0.5 |
| | | 20/125 PM DCF or SCF | =<0.5 |
| | | 25/250 PM DCF | =<0.5 |
| 7 | 10/125 PM DCF** | 20/125 PM DCF | =<0.5 |
| | | 30/250 PM DCF | =<0.5 |
| | | 43/400 PM DCF | =<0.5 |

* 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 | Power Handling | | | 20 | W | |
| 4 | Operating Environment Temperature | -5 | | +70 | °C | |
| 5 | Operating Humidity | 5 | | 95 | %RH | Not recommended under high humidity. |
| 6 | Storage Temperature | -40 | | +85 | °C | |
| 7 | Package | C1, C4 | | | - | Refer to drawing. C1 - 10W, C4 - 20W |

Ordering Information

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

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

Package: C1, C4 (C1: 10W; C4: 20W)

For other handling power, please ask in details.