

(6+1)×1 Multi-Mode Pump Combiner (MPC)

Description

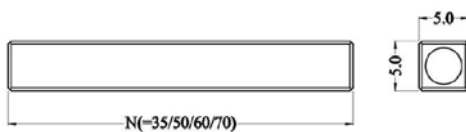
This (6+1)×1 multi-mode fiber combiner is designed for high power fiber laser application. It combines six pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

Key Features

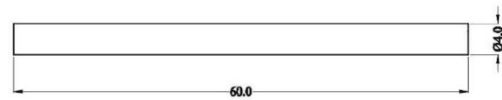
- High Signal Transfer Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- Custom Configurations Available

Mechanical Dimension

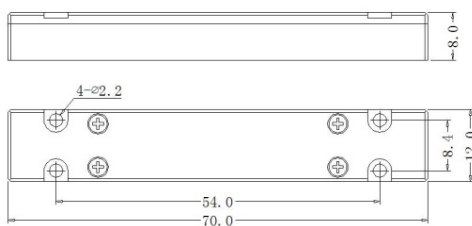
C1: 50x5x5



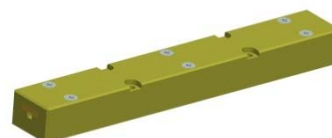
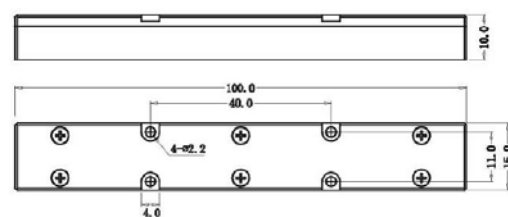
C2: Ø4x60



C4: 70x12x8



C7: 100x15x10



Unit: mm

Specifications

| Parameters/Test conditions | | Min | Typ. | Max | Unit | Note |
|----------------------------|-----------------------------------|---------------------|---------------|----------------------------|------|---|
| 1 | Signal Operating Wavelength | 1000 | 1064 | 1100 | nm | |
| 2 | Pump Operating Wavelength | 800 | | 1000 | nm | |
| 3 | Pump Fiber | Core Diameter | | 105 | μm | Refer to fiber codes |
| 4 | | Cladding Diameter | | 125 | μm | |
| 5 | | Numerical Aperture | 0.15 | | - | |
| 6 | Signal Fiber | HI1060 or 6/125 DCF | | | | Refer to fiber codes |
| | | Pump Efficiency (%) | | Signal Insertion Loss (dB) | | Power Handling (W, each port) |
| 7 | Output Fiber | 6/125 DCF | >90 (Typ. 93) | <0.7 (Typ. 0.5) | | 25 |
| | | 10/125 DCF | >90 (Typ. 93) | <0.7 (Typ. 0.5) | | 25 |
| | | 12/125 DCF | >90 (Typ. 93) | <0.7 (Typ. 0.5) | | 25 |
| | | 15/125 DCF | >90 (Typ. 93) | <0.7 (Typ. 0.5) | | 25 |
| | | 20/125 DCF | >90 (Typ. 93) | <0.7 (Typ. 0.5) | | 25 |
| | | 20/200 DCF | >95 (Typ. 97) | <0.7 (Typ. 0.5) | | 50 |
| | | 25/250 DCF | >95 (Typ. 97) | <0.7 (Typ. 0.5) | | 50 |
| | | 30/250 DCF | >95 (Typ. 97) | <0.7 (Typ. 0.5) | | 50 |
| | | 20/400 DCF | >95 (Typ. 97) | <0.7 (Typ. 0.5) | | 50 |
| 8 | M ² | | | 1.3 | - | |
| 9 | Optical Isolation | 20 | | | dB | |
| 10 | Fiber Length | 0.8 | | | m | Each port |
| 11 | Operating Environment Temperature | -5 | | +70 | °C | |
| 12 | Operating Humidity | 5 | | 95 | %RH | Not recommend in high humidity for long time. |
| 13 | Storage Temperature | -40 | | +85 | °C | |
| 14 | Package | C1, C2, C4, C7 | | | - | Handling power is different with PKG |

Ordering Information

MPC-(6+1)×1-F(B)-Pump wavelength/Pump power-Signal wavelength-Pump fiber/Signal fiber-Output fiber-Package-Fiber length

Note :

F: Forward pump; B: Backward pump.

Pump/Signal/Output fiber: refer to fiber codes.

Package: C1, C2, C4, C7

C1: 5W/port; C2: 5W/port; C4: total power < 150W, C7: total power ≥150W