

(2+1)×1 Multi-Mode Pump Combiner (MPC)

Description

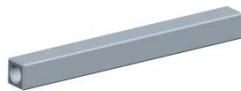
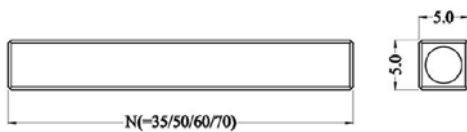
This (2+1)×1 multi-mode fiber combiner is designed for high power fiber laser application. It combines two pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

Key Features

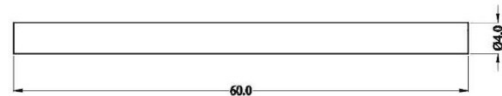
- High Signal Transfer Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- Custom Configurations Available

Mechanical Dimension

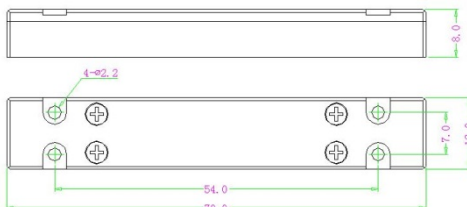
C1: 50x5x5



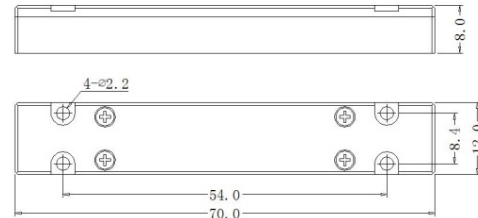
C2: Ø4x60



C3: 70x12x8



C4: 70x12x8



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, 0.22 | | - | |
| 6 | Signal Fiber | 20/125 SCF or 20/125 DCF | | | | Refer to fiber codes |
| | | Pump Efficiency (%) | | Signal Insertion Loss (dB) | | Refer to fiber codes |
| 7 | Output Fiber | 20/125 DCF * | | >90 (Typ. 93) <0.5 (Typ. 0.3) | | |
| | | 20/125 DCF ** | | >90 (Typ. 93) <0.7 (Typ. 0.5) | | |
| 8 | M ² | | | 1.3 | - | |
| 9 | Optical Isolation | 25 | 30 | | dB | |
| 10 | Fiber Length | 0.8 | | | m | Each port |
| 11 | Power Handling | | 25 | 50 | W | Each port |
| 12 | Operating Environment Temperature | -5 | | +70 | °C | |
| 13 | Operating Humidity | 5 | | 95 | %RH | Not recommend in high humidity for long time. |
| 14 | Storage Temperature | -40 | | +85 | °C | |
| 15 | Package | C1, C2, C3, C4 | | | - | Handling power is different with PKG |

* 20/125 DCF signal fiber to 20/125 DCF;

** 20/125 SCF signal fiber to 20/125 DCF.

Ordering Information

MPC-(2+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, C3, C4

C1: 10W/port; C2: 10W/port; C3: 25W/port; C4: 50W/port