

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

## Description

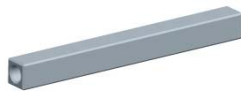
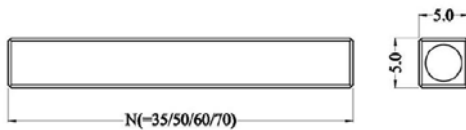
This (6+1)×1 multi-mode fiber combiner is designed for high power fiber laser application. It combines six pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

## Key Features

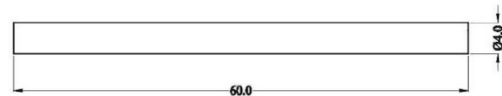
- High Signal Transfer Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- Custom Configurations Available

## Mechanical Dimension

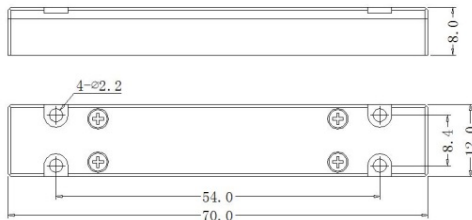
**C1: 50x5x5**



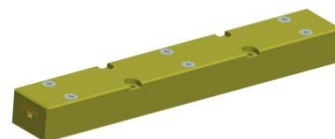
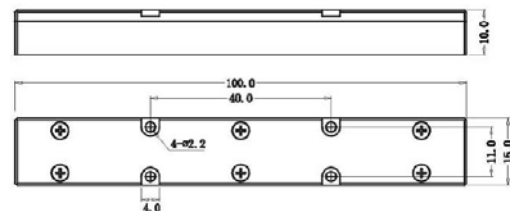
**C2: Ø4x60**



**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	0.22		-	
6	Signal Fiber	10/125 SCF or 10/125 DCF				Refer to fiber codes
		Pump Efficiency (%)		Signal Insertion Loss (dB)		Power Handling (W, each port)
7	Output Fiber	10/125 DCF	>92 (Typ. 92)	<0.7 (Typ. 0.5)		25
		12/125 DCF	>92 (Typ. 92)	<0.7 (Typ. 0.5)		25
		15/125 DCF	>92 (Typ. 92)	<0.7 (Typ. 0.5)		25
		20/125 DCF	>92 (Typ. 92)	<0.7 (Typ. 0.5)		25
		20/200 DCF	>93 (Typ. 95)	<0.7 (Typ. 0.5)		25
		25/250 DCF	>93 (Typ. 95)	<0.7 (Typ. 0.5)		50
		30/250 DCF	>93 (Typ. 95)	<0.7 (Typ. 0.5)		50
		20/400 DCF	>95 (Typ. 97)	<0.7 (Typ. 0.5)		50
8	M <sup>2</sup>			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 &lt; 150W, C7: total power &gt;= 150W