

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

## Description

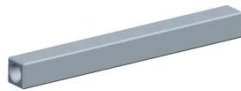
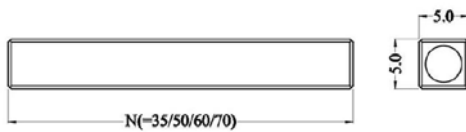
This (2+1)×1 multi-mode fiber combiner is designed for high power fiber laser application. It combines two pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

## Key Features

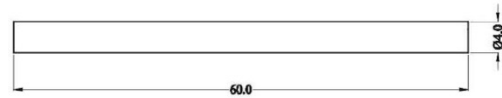
- High Signal Transfer Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- Custom Configurations Available

## Mechanical Dimension

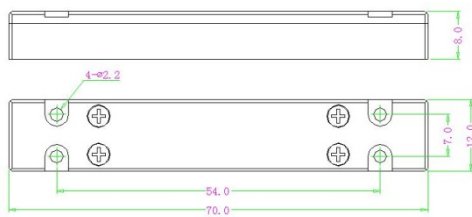
**C1: 50x5x5**



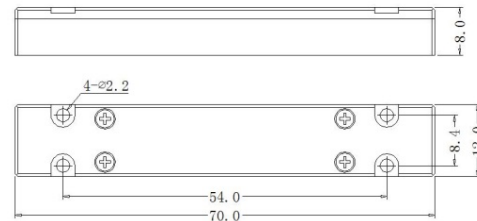
**C2: Ø4x60**



**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	HI1060 or 6/125 DCF				Refer to fiber codes
		Pump Efficiency (%)		Signal Insertion Loss (dB)		Refer to fiber codes
7	Output Fiber	6/125 DCF *		>90 (Typ. 93) <0.5 (Typ. 0.3)		
		6/125 DCF **		>90 (Typ. 93) <0.7 (Typ. 0.5)		
		10/125 DCF		>90 (Typ. 93) <0.7 (Typ. 0.5)		
		12/125 DCF		>90 (Typ. 93) <0.7 (Typ. 0.5)		
		15/125 DCF		>90 (Typ. 93) <0.7 (Typ. 0.5)		
		20/125 DCF		>90 (Typ. 93) <0.7 (Typ. 0.5)		
8	M <sup>2</sup>			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

\* 6/125 DCF signal fiber to 6/125 DCF;

\*\* HI1060 signal fiber to 6/125 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