

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

## Description

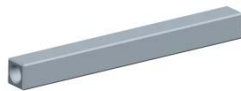
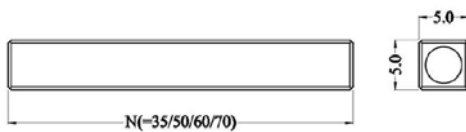
This (2+1)×1 multi-mode fiber combiner is designed for high power fiber laser application. It combines two pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

## Key Features

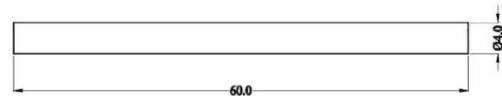
- High Signal Transfer Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- Custom Configurations Available

## Mechanical Dimension

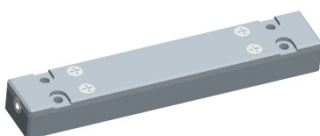
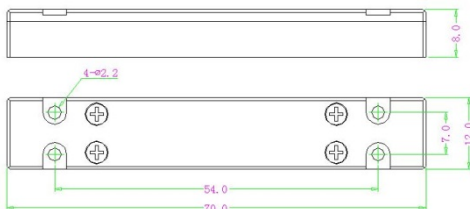
**C1: 50x5x5**



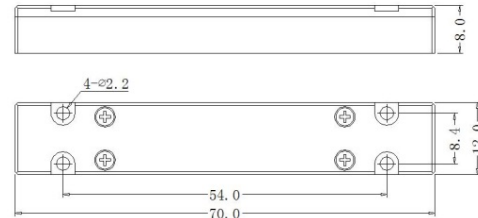
**C2: Ø4x60**



**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	$\mu\text{m}$	Refer to fiber codes
4		Cladding Diameter		125	$\mu\text{m}$	
5		Numerical Aperture	0.15, 0.22		-	
6	Signal Fiber	x/250 SCF or x/250 DCF (x=25,30)				Refer to fiber codes
		Pump Efficiency (%)		Signal Insertion Loss (dB)		Refer to fiber codes
7	Output Fiber	x/250 DCF *		>90 (Typ. 93) <0.5 (Typ. 0.3)		
		x/250 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

\* x/250 DCF signal fiber to x/250 DCF;

\*\* x/250 SCF signal fiber to x/250 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