

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

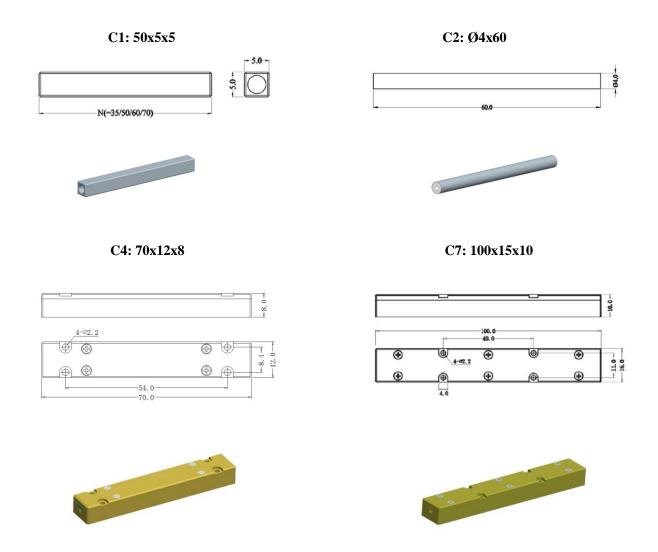
# Description

This  $(6+1)\times 1$  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





Unit: mm

# Specifications

Parameters/Test conditions			Min	Тур.	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		20/125 SCF or 20/125 DC			CF	Refer to fiber codes	
			Pump Efficiency		Signal Insertion		Power Handling	
			(%)		Loss (dB)		(W, each port)	
7	Output Fiber	20/125 DCF	>90 (Ty	p. 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		<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	
12							humidity for long time.	
13	Storage Temperature		-40		+85	°C		
14	Package		C1, C2, C4, C7			-	Handling power is different with PKG	

# Ordering Information

 $MPC-(6+1)\times 1-F(B)-Pump\ wavelength/Pump\ power-Signal\ wavelength-Pump\ fiber/Signal\ fiber-Output\ fiber-Package-Fiber\ length/Pump\ power-Signal\ wavelength-Pump\ fiber/Signal\ fiber-Output\ fiber-Package-Fiber\ length/Pump\ power-Signal\ wavelength/Pump\ power-Signal\ wavelength/Pump\ power-Signal\ fiber-Output\ fiber-Package-Fiber\ length/Pump\ power-Signal\ wavelength/Pump\ power-Signal\ wavelength/Pump\ power-Signal\ power-S$ 

#### 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