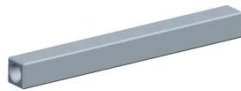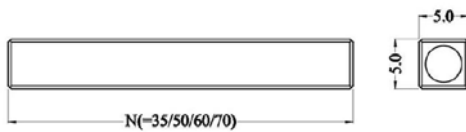# (6+1)×1 Multi-Mode Pump Combiner (MPC)

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.
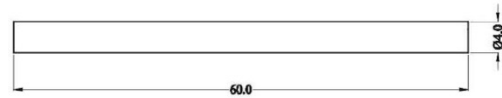
Key Features

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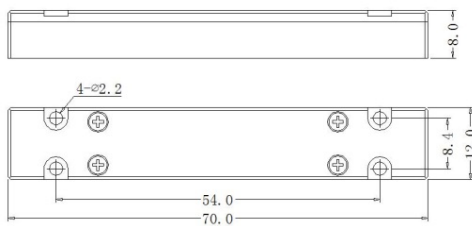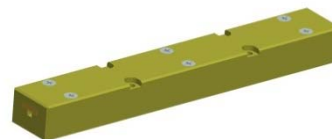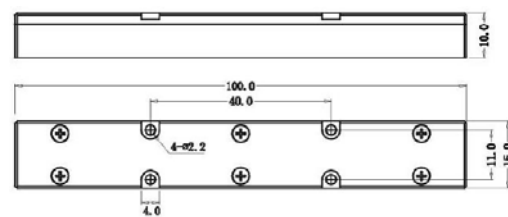
Mechanical Dimension

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		HI1060 or 6/125 DCF				Refer to fiber codes
			Pump Efficiency (%)	Signal Insertion Loss (dB)		Power Handling (W, each port)	
7	Output Fiber	6/125 DCF	>90（Typ. 92）	<0.7（Typ. 0.5）		25	
		10/125 DCF	>90（Typ. 92）	<0.7（Typ. 0.5）		25	
		12/125 DCF	>90（Typ. 92）	<0.7（Typ. 0.5）		25	
		15/125 DCF	>90（Typ. 92）	<0.7（Typ. 0.5）		25	
		20/125 DCF	>90（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^2				1.3	-	
9	Optical Isolation		20			dB	
10	Fiber Length		0.8			m	Each port
11	Operating Environment Temperature		-5		+70	^{o}C	
12	Operating Humidity		5		95	%RH	Not recommend in high humidity for long time.
13	Storage Temperature		-40		+85	^{o}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 < 150W, C7: total power >= 150W