(6+1)*1 Multi-Mode Pump Combiner (MPC)

Description

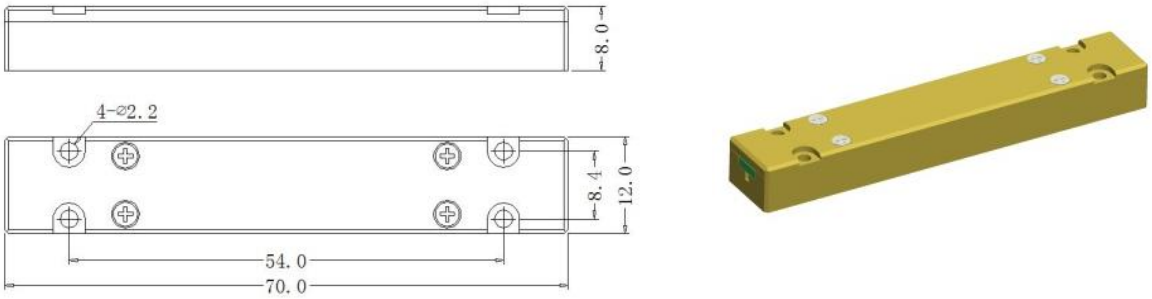
This (6+1)*1 multi-mode fiber combiner is designed for high power fiber laser application. It combines six pump lasers and one signal channel into one double cladding output fiber. Fiber type can be customized.

Key Features

- High Signal Transmission Efficiency
- High Pump Efficiency
- Wavelength Insensitive
- High Power Handling Capability
- Custom Configurations Available

Mechanical Dimension

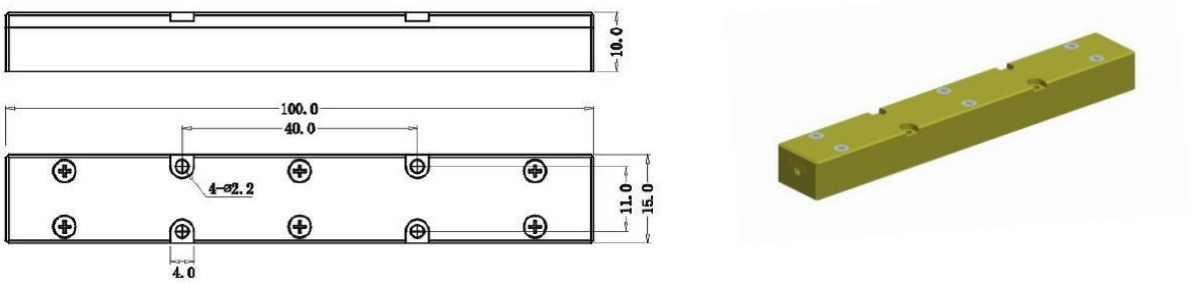
(1) C4: 70x12x8



Total Pump Power Handling≤200W

Unit: mm

(2) C7: 100x15x10



Total Pump Power Handling＞200W

Unit: mm

Specifications

Parameters/Test conditions			Min	Typ.	Max	Unit	Note
1	Signal Operating Wavelength		1000	1064	1100	nm	
2	Pump Operating Wavelength		800	915	1000	nm	
3	Pump Fiber	Core Diameter		105		μm	Refer to fiber codes: "110": 105/125 0.22NA "120": 105/125 0.15NA
		Cladding Diameter		125		μm	
		Numerical Aperture	0.15 or 0.22			-	
4	Signal Input Fiber		X/125 SCF or DCF				X=6,10,15,20… etc. Refer to fiber codes
5	Signal Output Fiber		Y/250 DCF				Y≥X Y=20,25,30, … etc. Refer to fiber code
6	Pump Efficiency		95	96		%	Tested by 915nm Pump
7	Signal Insertion Loss			0.5	0.7	dB	Depending on input signal
8	M^2			1.1	1.3	-	Input M2<1.05 tested
9	Power Handling			100	300	W	Each port
10	Fiber Length		1.0			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		-20		+70	°C	
14	Package		C4 or C7			-	Handling power is different with PKG

Note:

(1) Parameters above are specified at room temperature.

(2) Bottom side of device must be mounted onto heat sink with good interface contact and active cooling.

Ordering Information

MPC-(6+1)*1-F-Pump wavelength/Pump power-Signal wavelength-Pump fiber codes/Signal Input fiber codes-Signal Output fiber codes-Package type-Fiber length

Fiber: Please refer to Lightcomm fiber codes.

Note:

F=Forward pump, B=Backward pump