



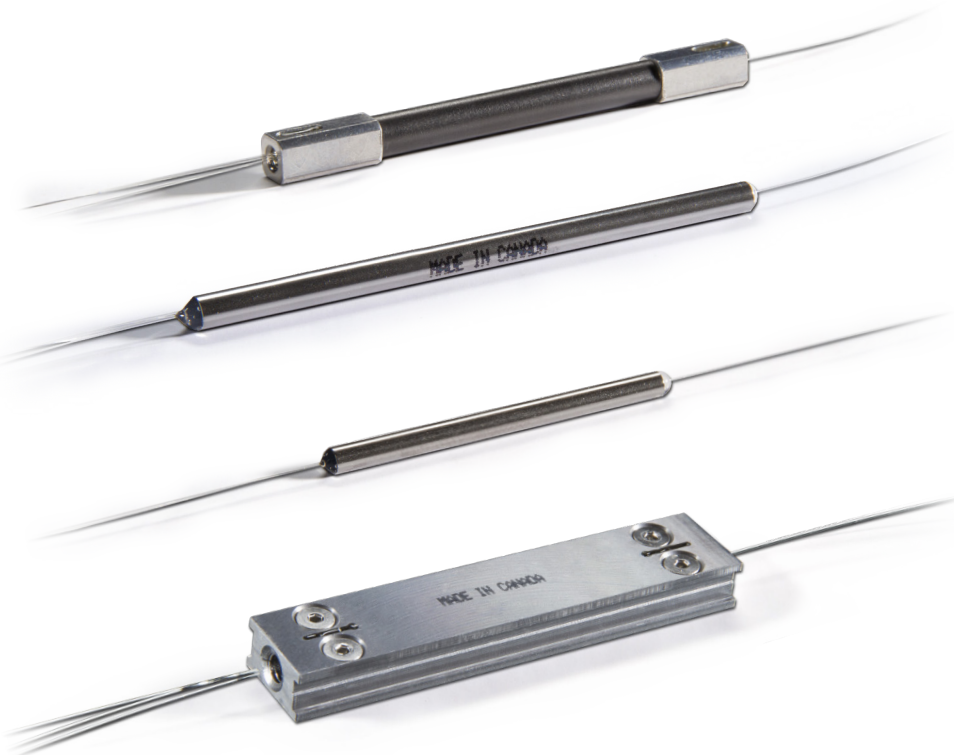
MULTIMODE COMPONENTS

(2+1)x1 and (1+1)x1 Pump and Signal Combiners

For Fiber Lasers and Amplifiers

ITF Technologies' Multimode Pump and Signal Combiners feature exceptional optical performance. These devices can be used to combine the power from one or two laser diodes with a signal feed into a double clad fiber (DCF). These combiners are designed to address the industrial, medical and telecommunications markets.

ITF Technologies' Multimode Pump and Signal Combiners offers very efficient pump power transmission in applications such as fiber lasers and fiber amplifiers, with the best signal quality transmission. They are designed to meet a wide range of power handling configurations and a large selection of input/output fiber types.



KEY FEATURES

- High Power Transfer Efficiency
- Preservation of Modal Content
- Wavelength Insensitive
- Custom Configurations Available
- Multiple power handling available
- ROHS Compliant
- Suitable for co- and conter-pump applications

APPLICATIONS

- Fiber Lasers
- Fiber Laser Seed Amplifiers
- Fiber Laser Power Amplifiers
- CATV Amplifiers
- Industrial, Telecom & Research

FOR MORE INFO

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**(2 + 1)x1 and (1 + 1)x1 Pump
and Signal Combiners**

**FOR FIBER LASERS AND AMPLIFIERS
CONFIGURATION / PACKAGE**

Standard signal operating wavelength range: 1040-1080 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
5/130 um NA=0.14/0.46	MMC02112DF1	MMC02112DF3	MMC02112DF0	MMC01112DF0
PM 5/130 um NA=0.14/0.46	PMC02112341	PMC02112343	PMC02112340	PMC01112340
10/125 um NA=0.08/0.46	MMC02112CC1	MMC02112CC3	MMC02112CC0	MMC01112CC0
PM 10/125 um NA=0.08/0.46	PMC02112A71	PMC02112A73	PMC02112A70	PMC01112A70
15/130 um NA=0.08/0.46	MMC02112BA1	MMC02112BA3	MMC02112BA0	MMC01112BA0
PM 15/130 um NA=0.08/0.46	PMC02112411	PMC02112413	PMC02112410	PMC01112410
25/250 um NA=0.06/0.46	MMC0211C3867	n/a	n/a	n/a
PM 25/250 um NA=0.06/0.46	PMC0211C4430	n/a	n/a	n/a
25/250 um NA=0.11/0.46	MMC021129D1	n/a	n/a	n/a
PM 25/250 um NA=0.11/0.46	PMC02112631	n/a	n/a	n/a

Standard signal operating wavelength range: 1530-1570 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
SM 1550 DCF	MMC02112EG1	MMC02112EG3	MMC02112EG0	MMC01112EG0
PM 1550 DCF	PMC02112861	PMC02112863	PMC02112860	PMC01112860
8/125 um NA=0.14/0.46	MMC02112A61	MMC02112A63	MMC02112A60	MMC01112A60
PM 8/125 um NA=0.14/0.46	√	√	√	√
25/300 um NA=0.10/0.46	MMC0211C6313	n/a	n/a	n/a
PM 25/300 um NA=0.10/0.46	PMC0211C6713	n/a	n/a	n/a

Standard signal operating wavelength range: 1980-2020 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
10/125 um NA=0.15/0.46	MMC0211C4057	√	MMC0211C3658	√
PM 10/130 um NA=0.15/0.46	PMC0211C3962	√	PMC0211C7377	√

√: Product available - product code not yet defined
Pump fiber in all presented product codes: 105/125 um NA=0.22

PACKAGE DIMENSIONS

High Power: 60.0 x 12.0 x 6.5 mm
Mid Power: 60.0 x 5.0 x 5.0 mm
Value Line and Injector: 65.0 x 3.5 (D) mm
Injector: 40.0 x 3.0 (D) mm

Signal optimized for fundamental mode transmission

Maximum pump insertion loss: 0.5 dB (typical)
Pump Optical Return Loss: > 35 dB
PER value of PM components: > 20 dB

Typical power handling presented

Custom designs and prototypes also available

ORDERING INFO

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