



# Multimode Fiber Couplers



## Features

- Low Insertion Loss
- Wide Operating Wavelength
- Compact Size
- Excellent Environmental & Mechanical Stability

## Applications

- Local Area Networks
- CATV Systems
- Subscriber Loop
- Fiberoptic Instruments
- Fiber Sensors

## Performance Specifications

Type	Multimode Standard Fiber Couplers	
Coupling Ratio (%)	50/50	
Grade	P	A
Excess Loss (Typical) (dB)	0.5 (0.8)*	0.7 (1.0)*
Max. Insertion Loss (dB)	3.5 (4.0)*	3.7 (4.2)*
Uniformity (Max.) (dB)	0.6	0.8
Directivity (Min.) (dB)	35	
Central Wavelength (nm)	850 or 1310 or 1550	
Operating Temperature (°C)	-20 ~ +70 (-40 ~ +85 available upon request)	
Fiber Type	Corning multimode 50/125, 62.5/125, 100/140 fiber	
Fiber Pigtail Length (m)	1m or custom request	
Port Configuration	1x2 or 2x2	
Dimensions (mm)	Package M, A,B,C	

Type	Multimode 1 x 3, 1 x 4 True Fusion Couplers	
Port Configuration	1 x 3	1 x 4
Grade	P	P
Max. Insertion Loss (dB)	6.0 (6.5)*	7.2 (7.6)*
Uniformity (Max.) (dB)	1.2	1.2
Directivity (Min.) (dB)	35	
Central Wavelength (nm)	850 or 1310 or 1550	
Operating Temperature (°C)	-20 ~ +70 (-40 ~ +85 available upon request)	
Fiber Type	Corning multimode 50/125, 62.5/125, 100/140 fiber	
Fiber Pigtail Length (m)	1m or custom request	
Dimensions (mm)	Package A, B,C	

Note: All values referenced are without connector.

## Performance Specifications

Type	Multimode Tree/Star Couplers		
Configuration Type	n x 4 (n=1,2,4,)	n x 8 (n =1,2,8)	n x 16 (n =1,2,16)
Max. Insertion Loss (dB)	7.0/7.6*	10.5/11.0*	14.0/15.0*
Uniformity (Max.) (dB)	1.5	2.0	2.5
Directivity (Min.) (dB )	40		
Central Wavelength (nm)	850 or 1310		
Operating Temperature (°C)	-20 ~ +70 (-40 ~ +85 available upon request)		
Fiber Type	Corning multimode 50/125, 62.5/125, 100/140 fiber		
Fiber Pigtail Length (m)	1m or custom request		
Dimensions (mm)	S, D	D	E

\* For 50/125  $\mu$ m, 62.5/125 $\mu$ m fiber operating wavelength is at 850nm.

\*\* Measured under the stable mode condition with LED light source (CPR < 12).

Note: All values referenced are without connector.

## Ordering Information

Type	Grade	Wavelength	Coupling Ratio or Attenuation (dB)	Port	Package	Pigtail Style	Fiber Type	In/Out Connector
M	P A	85=850nm 13=1310nm 15=1550 nm	50=50/50 30=30/70 10=10/90 05=5/95 01=1/99 AV =Tree Coupler	0102=1x2 0202=2x2 0103=1x3 0303=3x3 0104=1x4 · · · 0116=1x16 1616=16x16 3232=32x32	A=Package A B=Package B C=Package C D=Package D E=Package E M=Package M S=Package S	1=Bare Fiber 2=900 $\mu$ m Jacket 3=3mm Cable	2=50/125 $\mu$ m 3=62.5/125 $\mu$ m 4=100/140 $\mu$ m 5=Special fiber	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC X=Special

## Dimensions & Pigtail Style

### Package Dimensions:

Package M:

3 mm x 40 mm Stainless Steel Tube

Package A:

3 mm x 54 mm Stainless Steel Tube

Package B:

3 mm x 60 mm Stainless Steel Tube

Package C:

8.5 mm x 14 mm x 98 mm Case

Package S:

9.2mm x 50.88mm x 88.9mm

Package D:

11.6mm x 80mm x 120mm

Package E:

14.5mm x 102mm x 142mm

### Pigtail Style:

Package M, A:

Package A, B:

Package C:

Package D, E:

Package S:

250 $\mu$ m Bare Fiber

250 $\mu$ m Bare Fiber or 900 $\mu$ m Loose Tube

3mm Cable or 900 $\mu$ m Loose Tube

3mm Cable or 900 $\mu$ m Loose Tube

250 $\mu$ m Bare Fiber or 900 $\mu$ m Loose Tube

