

Multimode Fiber Optic Coupler

Multimode Fiber Optic Coupler(MM FBT Coupler) are fabricated from Corning's multimode fibers with core diameters of 50um ,62.5um or 100um. Standard multimode couplers are commonly used in short distance communications with LED sources operating at 1310nm or 850nm. Multimode couplers are wavelength independent over a broad range of wavelengths (600nm to 1610nm) with uniform modal power distribution launch condition, multimode tree/star couplers NX4(n=1,2,4) NX8(n=1,2,8) NX16(n=1,2,16) port ratios are available.

Multimode coupler have been extensive used to split and mix optical signals in CATV, LANs and all other kinds of optical communication systems.

Features

- Low Excess Loss
- Uniform Power Splitting
- Rugged Package
- Excellent Environmental & Mechanical Stability

Applications

- Long-haul Telecommunications
- Digital, Hybrid and AM-Video Systems
- CATV Systems
- High Speed Local Area Networks
- Fiber Sensors



Performance Specifications

Type	Multimode Standard Fiber Couplers	
Coupling Ratio (%)	50/50	
Grade	A	B
Excess Loss (Typical) (dB)	0.4	0.7
Max. Insertion Loss (dB)	3.7	4.0
Uniformity (Max.) (dB)	0.6	0.8
Directivity (Min.) (dB)	35	
Operating Wavelength (nm)	600-1600	
Central Wavelength (nm)	850 or 1310 or 1550	
Operating Temperature (°C)	-20 - +85	
Fiber Type	Corning multimode 50/125, 62.5/125, 100/140 fiber	
Fiber Pigtail Length (m)	1 m or custom length	
Port Configuration	1x2 or 2x2	
Dimensions (mm)	Package D, E, F,G	

*All the values above are tested without connectors.

Ordering Information

X	XX	XX	XXXX	X	X	X	XX
Grade	Wavelength	Coupling Ratio	Port	Package	Pigtail Style	Fiber Type	In/Out Connector
P	85=850nm	50=50/50	0102=1x2	1=Package 1	1=Bare Fiber	2=50/125um	0=None
A	13=1310nm	30=30/70	0202=2x2	2=Package 2	2=900µm	3=62.5/125um	1=FC/APC
B	15=1550nm	10=10/90	0103=1x3	3=Package 3	Loose tube	4=100/140um	2=FC/PC
		05=05/95	0303=3x3	D=Package D	3=3mm Cable	5=Special fiber	3=SC/APC
		01=1/99	0104=1x4	E=Package E	4=2mm Cable		4=SC/PC
		AV=Tree Coupler	F=Package F			5=ST
			0116=1x16	G=Package G			6=LC
			1616=16x16				X=Special
			3232=32x32				

Type	Multimode 1x3, 1x4 True Fusion Couplers	
Port Configuration	1x3	1x4
Grade	P	P
Max. Insertion Loss (dB)	6.0	7.2
Uniformity (Max.) (dB)	1.2	1.2
Directivity (Min.) (dB)	35	
Operating Wavelength (nm)	600-1600	
Central Wavelength (nm)	850 or 1310	
Operating Temperature (°C)	-40 - +85	
Fiber Type	Corning multimode 50/125, 62.5/125, 100/140 fiber	
Fiber Pigtail Length (m)	1 m or custom length	
Dimensions (mm)	Package E, F, G	

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)	7.5	10.5/11.0	14.0/15.0
Uniformity (Max.) (dB)	1.5	2.0	2.5
Directivity (Min.) (dB)	40dB		
Operating Wavelength (nm)	600-1600		
Central Wavelength (nm)	850 or 1310		
Operating Temperature (°C)	-20 - +85		
Fiber Type	Corning multimode 50/125, 62.5/125 fiber, 100/140 fiber		
Fiber Pigtail Length (m)	1 m or custom length		
Dimensions (mm)	Package E, F, 1, 3	Package 1	Package 2

*Measured under the stable mode condition with LED light source.

Package Dimensions & Pigtail Style

Multimode Fiber Coupler Package Dimensions:	
Package E:	3mm x 54mm stainless steel tube
Package F:	3mm x 60mm stainless steel tube
Package G:	10mm x 20mm x 90mm case
Package 1:	18mm x 80mm x 120mm
Package 2:	14.5mm x 102mm x 142mm
Package 3:	10mm x 80mm x 100mm
Pigtail Style:	
Package 1,2:	2mm,3mm cable or 900um loose tube
Package 3:	900um loose tube