

Monolithic 3x3 Optical Fiber Couplers

FEATURES:

- Low excess loss
- High directivity
- Low PDL
- Good environmental stability
- High return loss

APPLICATIONS:

- Power splitting
- Optical fiber gyroscopes
- Optical fiber sensors
- Optical fiber networks

High performance 3x3 couplers in the 1300nm & 1550nm wavelength regions

The Phoenix Photonics range of fused fiber couplers has been developed to offer the designer flexibility in optimizing system performance. The proven FBT technology base has been utilized to optimize specific device parameters, reflected in the specific product categorization. Parameters that can be selected through the choice of appropriate device are; coupling ratio, insertion loss, wavelength flatness, polarization stability and center wavelength

Monolithic 3x3 couplers

These couplers are fabricated by fusing 3 fibers together to couple power input from any one fiber equally between the three output fibers. The fused, monolithic configuration provides optimum loss performance and environmental stability in a range of application areas.

SPECIFICATION:	Units	3x3 monolithic couplers	
Wavelength	nm	1310 or 1550	
Bandwidth	nm	+-20	
Splitting Ratio	%	33/33/33	
Grade		P	A
Excess Loss (Typ.)	dB	0.10	0.15
PDL	dB	<0.10	<0.15
Directivity	dB	>55	>50
Insertion Loss ¹ (Typ.)	dB	4.9	5.0
Insertion Loss ¹ (Max.)	dB	5.4	5.6
Uniformity	dB	1.0	1.2
Flatness	dB	0.5/0.3/0.3	
Temperature Stability	dB/°C	0.003	
Operating Temperature	°C	-40 to +85	
Storage Temperature	°C	-40 to +85	

Lead Type	250µm	900µm loose tube	3mm cable
Package Dimensions	3mm dia. x48mm	3.5mm dia. x 66mm 90mmx16mmx9mm	90mmx16mmx9mm

PRODUCT ORDERING INFORMATION:

M	F	C	-	3	-		-		-					
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 25%;"> Wavelength: 1300 1550 </td> <td style="text-align: center; width: 25%;"> Cable type: 0 – none 1 – 900µm loose tube </td> <td style="text-align: center; width: 25%;"> Package style: A B </td> <td style="text-align: center; width: 25%;"> Connectors: 0 – none 1 – FC/SPC 2 – FC/APC 3 – SC/SPC 4 – SC/APC 5 – ST/PC 6 – LC/PC 7 – MU/PC 8 – other </td> </tr> </table>											Wavelength: 1300 1550	Cable type: 0 – none 1 – 900µm loose tube	Package style: A B	Connectors: 0 – none 1 – FC/SPC 2 – FC/APC 3 – SC/SPC 4 – SC/APC 5 – ST/PC 6 – LC/PC 7 – MU/PC 8 – other
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Phoenix Photonics Limited

Web: www.phoenixphotonics.com Email: sales@phoenixphotonics.com

V2_01402