

Product Bulletin



Asymmetric Fused Couplers

The asymmetric fused couplers are compact, lowloss components (1x2 or 2x2) that are bidirectional and provide a means of splitting or combining optical signals. They are designed for use in telecommunications equipment, passive telephony or CATV networks, test equipment, and fiber sensors. The coupler is particularly useful as a power tap, for assembling symmetric trees with arbitrary port counts, and for optimizing power budgets in passive networks. It uses advanced fused-fiber technology to yield ultra-low excess loss and low polarization dependent loss (PDL) in a compact package. The coupler is available for use at 1300 and/or 1550 nm or at 1585 nm wavelengths. The couplers are also available for operation at 1310 or 1310/1550 nm wavelengths and with various coupling ratios other than those listed.

Key Features

- Ultra-low excess loss
- Low PDL
- Single-wavelength, wavelength-flattened and wideband versions

Applications

• Passive optical networks

Specifications

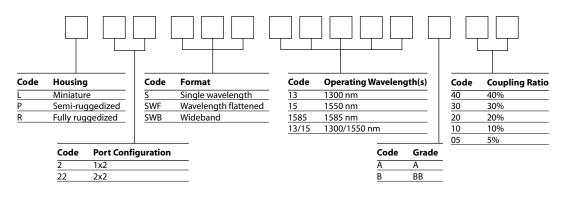
Parameter	Asymmetric Fused Couplers Single wavelength (1300, 1550, or 1585 nm), Wavelength flattened (1300 ±20, 1550 ±20, or 1585 nm ±20), or										
Operating wavelength											
		Wideband (1300 ±20 and 1550 nm ±20)									
Coupling ratio		60/40		70/30		80/20		90/10		95/5	
Grade		А	BB	А	BB	А	BB	А	BB	А	BB
Typical excess loss		0.1 dB	0.2 dB	0.1 dB	0.2 dB	0.1 dB	0.2 dB	0.1 dB	0.2 dB	0.1 dB	0.2 dB
Signal insertion loss ¹	maximum	2.8 dB	3.0 dB	2.0 dB	2.2 dB	1.4 dB	1.5 dB	0.8 dB	0.9 dB	0.5 dB	0.6 dB
	minimum	1.9 dB	1.8 dB	1.3 dB	1.2 dB	0.75 dB	0.7 dB	0.35 dB	0.3 dB	0.15 dB	0.1 dB
Tap insertion loss	maximum	4.7 dB	4.9 dB	6.1 dB	6.4 dB	8.0 dB	8.4 dB	11.5 dB	12.2 dB	15.3 dB	15.9 dB
	minimum	3.5 dB	3.4 dB	4.6 dB	4.5 dB	6.3 dB	6.1 dB	8.9 dB	8.5 dB	11.6 dB	11.4 dB
Return loss/directivity	50 dB										
Polarization depender	0.2 dB										
Fiber	Corning SMF-28										
Dimensions	L-type Ø 3.0 x 45 mm (single wavelength)										
		L-type Ø 3.0 x 50 mm (wavelength flattened and wideband)									
		P-type Ø 5.0 x 75 mm									
		R-type 80 x 10 x 8 mm									
Pigtail length	>1000 mm										

1. In 2x2 port couplers with coupling ratio of 20% or lower, insertion loss is not specified for launch through 2nd input.

Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please print the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact your JDS Uniphase account manager, or call 1-877-550-JDSU toll free in North America, or visit www.jdsuniphase.com.

Sample: R2SWF15B20



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