

HIGH RELIABILITY COMPONENTS & MODULES

WIDEBAND COUPLERS

KEY FEATURES

- Wide Bandwidth
- Low PDL
- Low Loss
- High Reliability
- High Power Handling

ITF's Wideband Couplers are wavelength independent devices that are used in polarization sensitive applications for splitting or coupling light with minimal excess loss for a wide range of ratios. These high performance components are available in a wide variety of coupling ratios and wavelength ranges to meet any application.

For more information on this or other products and their availability, please contact our customer service at 514-748-4848 (int'l) / 888-922-1044 (Canada & USA only) or via e-mail at info@itfoptical.com.

SPECIFICATIONS

Parameter	Typical Values					
Operating Wavelength	(980±10) nm	(1480 ±10) nm	S Band (1480 ±20) nm	C Band (1550 ±20) nm	L Band (1590 ±20) nm	C+L Band (±50) nm
Return Loss ¹	55 dB					
Polarization Mode Dispersion	0.05 ps					
Directivity ¹	60 dB					
Power Handling	2 W					
Operating Temperature	-5°C to 70°C					
Storage Temperature	-20°C to 80°C					
Pigtail Length	> 1.0 m					
Coupling Ratio	See Coupling Ratio Table					

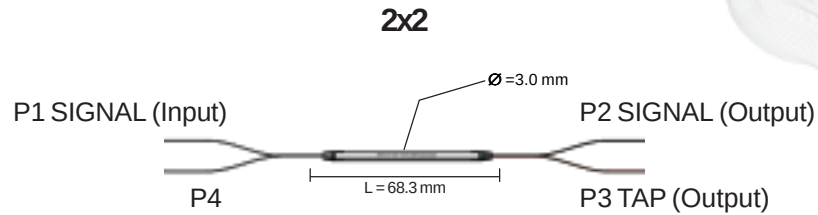
¹Value specified by design, conditional to termination of unused port

COUPLING RATIOS

Operating Wavelength	Coupling ratio ¹	Insertion Loss Signal Path ²	Insertion Loss Tap Path ²	PDL Signal Path	PDL Tap Path
(980±10)nm	1%	0.35	23.0	0.1	0.2
	2%	0.40	19.0	0.1	0.2
	5%	0.50	14.5	0.1	0.2
	10%	0.75	11.3	0.1	0.2
	20%	1.5	8.0	0.1	0.2
	30%	2.1	6.0	0.1	0.2
	40%	3.0	4.6	0.1	0.2
(1480±10)nm	50%	2.7-3.5	2.7-3.5	0.06	0.06
	1%	0.2	22	0.05	0.2
	2%	0.3	19	0.05	0.2
	5%	0.45	14	0.05	0.2
	10%	0.7	11	0.05	0.2
S Band (1480±20)nm	50%	2.8-3.3	2.8-3.3	0.1	0.1
	1%	0.2	22.5	0.05	0.2
	2%	0.3	19	0.05	0.2
	5%	0.45	14.7	0.05	0.2
	10%	0.8	11.5	0.05	0.2
	20%	1.1	8.2	0.1	0.2
	30%	1.6	6.4	0.1	0.2
C Band (1550±20)nm	40%	2.1	5.1	0.1	0.2
	50%	2.65-3.45	2.65-3.45	0.1	0.1
	1%	0.3	20	0.05	0.2
	2%	0.3	19	0.05	0.2
	5%	0.45	14.7	0.05	0.2
	10%	0.8	11.5	0.05	0.2
	20%	1.1	8.2	0.05	0.2
L Band (±20)nm	30%	1.6	6.4	0.05	0.2
	40%	2.1	5.1	0.05	0.2
	50%	2.75-3.35	2.75-3.35	0.05	0.05
	1%	0.3	20	0.05	0.2
	2%	0.3	19	0.05	0.2
	5%	0.45	14.7	0.05	0.2
	10%	0.8	11.5	0.05	0.2
C+L Band (±50)nm	20%	1.1	8.2	0.05	0.2
	30%	1.6	6.4	0.05	0.2
	40%	2.1	5.1	0.05	0.2
	50%	2.75-3.35	2.75-3.35	0.05	0.05
	1%	0.2	21	0.05	0.2
	2%	0.3	18	0.05	0.2
	5%	0.4	13.5	0.05	0.1
	10%	0.55	12	0.05	0.1
	20%	0.9	9	0.05	0.1
	50%	3.0-3.6	3.0-3.6	0.1	0.1

¹Other coupling ratios are available upon request
²Without Connectors

CONFIGURATION



ORDERING INFORMATION

For standard products, use following coding.
For custom projects please contact our customer service group.

SAMPLE: WBU094030

W	B	U				0
Code		Product		Code		Housing
U		Undersea/ High Reliability		3		Ø 3.0 mm
Code ¹		Passband		Code ¹		Coupling Ratio
9		980		01		1%
4		1480		02		2%
S		S Band		05		5%
C		C Band		10		10%
L		L Band		20		20%
W		C+L Band		30		30%
				40		40%
				50		50%

¹Other passbands and coupling ratios are available.



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