



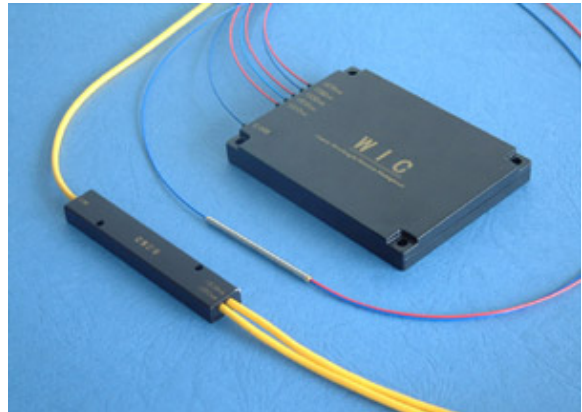
DUAL-WINDOW COUPLERS

Description

The dual-window single mode couplers are made using Fused Biconic Taper (FBT) Technique. They have dual window of 1310nm and 1550nm, minimal excess loss, long-term stability and high directivity. They are optimized at 1310 and 1550nm, and is available in a variety of coupling ratios.

1x2 couplers are used to split light with minimal loss from one into two fibers or to merge light from two fibers into one across broad wavelength regions in windows of 1310nm and 1550nm.

1xN tree couplers and NxN star couplers are made with fuse cascade-connecting (N-1) pieces of 1x2 and 2x2 couplers respectively.



Features

- Dual wavelength with wide bandwidth
- Low loss
- Low polarization dependence
- Environmentally stable
- Excellent uniformity

Applications

- Local Area Networks
- CATV distribution
- Fiber optic sensors
- DWDM systems
- Trunk/loop branching

Specifications

Characteristics		Unit	Value/Performance			
1X2, 2X2						
Center Wavelength		nm	1310 and 1550			
Bandwidth		nm	±40			
Excess Loss		dB	≤0.08 (0.06 typ.)			
Coupling Ratio		-	50/50	40/60	30/70	20/80
Typ. Insertion Loss		dB	3.06	4.1/2.3	5.3/1.6	7.1/1.0
Max. Insertion Loss		dB	3.6	4.7/2.7	6.0/1.9	7.9/1.2
Polarization Dependent Loss		dB	≤0.1	≤0.1	≤0.15/0.1	≤0.15/0.1
Thermal Stability		dB/°C	≤0.002 over -40 ~ +80°C			
Directivity	1x2	dB	≥50, ≥60 on request			
	2x2	dB	≥65			
Lead Length		m	1, others on request			
Lead Type		-	250um bare fiber	900um loose tube	2 or 3mm loose tube	
Package Type		-	A1	A3 or B	B	
Operating Temperature		°C	-40 ~ +80	-20 ~ +70	-20 ~ +70	

Specifications

Characteristics	Unit	Value/Performance			
1xN, NxN					
Configuration	-	N x 4 N=1,2, 4	N x 8 N=1,2, 8	N x 16 N=1,2, 16	N x 32 N=1,2, 32
Center Wavelength	nm	1310 and 1550			
Bandwidth	nm	±40			
Max. Excess Loss	dB	0.2	0.3	0.4	0.5
Typ. Insertion Loss	dB	6.2	9.3	12.4	15.5
Max. Insertion Loss	dB	7.0	10.5	14	17.5
Uniformity	dB	≤1.6	≤2.4	≤3.2	≤4.0
Polarization Dependent Loss	dB	≤0.2	≤0.3	≤0.4	≤0.5
Thermal Stability	dB	≤0.2	≤0.3	≤0.4	≤0.5
Directivity	dB	≥60			
Operating Temperature	°C	-20 ~ +70			
Lead Length	m	1, others on request			
Lead Type	-	900um, 2mm or 3mm loose tube			
Package Type	-	C	D	E	E

Dimensional Drawing

Please see coupler package information.

Ordering Information

Part Number: **DWC-22 3 -50/50SM 2 A3- 1 FU**

1 2 3 4 5 6 7

1	Configuration	12=1x2, 22=2x2, 18=1x8, 1616=16x16, 132=1x32, etc.
2	Wavelength	3=1310nm & 1550nm
3	Coupling Ratio	50/50, 40/60, 20/80, 25x4(for 25/25/25/25), etc.
4	Lead Type	1=250um, 2=900um, 3=2.0mm, 4=3.0mm
5	Package Type	A1, A3, B, C, D or E
6	Lead Length	0.5=0.5m, 1=1m, etc.
7	Connectors Terminated	Blank=no connector, FU=FC/UPC, FA=FC/APC, SU=SC/UPC, SA=SC/APC

Products manufactured in
ISO 9001 certified facilities



Pacific Interconnections • www.pacificinterco.com • 425-2779527

We reserve the rights to make any changes to the product(s) or information contained herein without notice. No liability is assumed.