LIGHTech FIBEROPTICS, INC.
1981 Adams Avenue
San Leandro, CA 94577
510.567.8700
510.567.8701 [fax]

Sales Support
510.567.8503
510.567.8307
510.567.8506 [fax]
800.567.1688 [Toll Free]

Performance Specifications

Single Mode Standard Couplers 1x2,2x2 Narrow Band ±10nm

Feature:

- Compact size
- Low insertion loss
- Low PDL
- Excellent uniformity
- High directivity
- Bi-directional
- Environmentally stable and reliable
- Coupling ratio 1% to 99%

Application:

- CATV
- Telecommunications
- Subscriber Loop
- Fiber-to-the-home
- Test equipment
- Local Area Networks(LAN)
- Optical fiber sensors
- Source distribution

Specification:

Parameter	A Grade	B Grade
Operation Wavelength (nm)	980, 1310, 1480 or 1550	
Uniformity	≤0.6	≤0.9
Polarization Stability (dB)	±0.1	±0.15
Directivity (dB)	>55	
Reflectance (dB)	>55	
Operation Temperature (°C)	-40 to +70	
Temperature Coefficient (dB/°C)	<0.001(Typ.),<0.002(Max.)	
Storage Temperature (°C)	-50 to +85	
Package Dimensions (mm)	Coated fiber : 3.0(φ)x54(L) Loose tube : 3.5.(φ)x65(L) PVC : 95(L)x11(W)x9.5(H)	

-20 °C~70°C for PVC cable

Single Mode Standard Couplers 1x3,3x3
Narrow Band ±10nm

Feature:

- Share resource optical networks
- Low insertion loss
- Low PDL
- Good uniformity
- Environmentally stable and reliable
- Coherent detection

Application:

- CATV
- Telecommunications
- Subscriber Loop
- Fiber-to-the-home
- Fiber gyroscopes

Specification

Parameter	A Grade		B Grade	
Operation Wavelength (nm)	1310,1550			
Configuration	1x3	3x3	1x3	3x3
Max. Insertion Loss(dB)	5.4	5.5	5.6	5.9
Uniformity	≤0.8	≤1.5	≤1.2	≤1.8
Polarization Stability (dB)	±0.1	±0.15	±0.2	
Directivity (dB)	>55		>55	
Operation Temperature (°C)	-40 to +70			
Temperature Coefficient (dB/°C)	<0.001(Typ.),<0.002(Max.)			
Storage Temperature (°C)	-50 to +85			
Package Dimensions (mm)	Coated Fiber : 3.0(φ)x54(L) Loose tube : 3.5.(φ)x65(L) PVC : 95(L)x11(W)x9.5(H)			

-20 °C~70°C for PVC cable

Single Mode Star and Tree Couplers
Narrow Band

Feature:

- Low insertion loss
- Excellent uniformity
- Wide variety of configurations
- Multi-channel splitting and combining
- Environmentally stable and reliable

Application:

- CATV
- Telecommunications
- Subscriber Loop
- Fiber-to-the-home

Specification:

Configuration		Nx4 (N=1,2,4)		1x6		Nx8 (n=1,2,8)		Nx16 (n=1,2,16)	
Operation Wavelength (nm)		980,1310,1480,1550							
Grade		A	B	A	B	A	B	A	B
Max. Insertion Loss(dB)		6.8	7.2	8.7	9.5	10.0	11.0	13.0	14.0
Uniformity		≤0.8	≤1.2	≤1.0	≤2.0	≤1.2	≤3.0	≤2.4	≤3.8
Polarization Stability (dB)		±0.1		±0.15				±0.2	
Temp. Coeff. (dB/°C)		<0.003		<0.004				<0.005	
Directivity (dB)		>55							
Operation Temp. (°C)		-40 to +70							
Storage Temp. (°C)		-50 to +85							
Package Dimensions (mm)	PVC	L:100 W:80 H:9.5		L:140 W:90 H:9.5					
	BOX	L:482 W:256 H:44		L:482 W:256 H:44				L:482 W:256 H:44(2X16) H:88(16X16)	

-20 °C~70°C for PVC cable

Ordering Information:

Example: SW1L2210A167

S W □ □ – 2 □ □ □ □ □ □ □

Code	Ports
1	1x2
2	2x2
3	1x3
4	3x3
5	1x4
6	2x4
7	4x4
8	1x8
9	2x8
0	Other type
A	8x8
B	1x16
C	2x16
D	16x16

Code	Package
C	Coated Fiber
L	Loose Tube
P	PVC/ABS
B	Mental box
0	Other Type

Code	Wavelength
2	1550nm
4	1480nm
5	1310nm
7	980nm
S	Dual Windows

Fiber Type
Corning SMF-28

Code	Coupling ratio
01	01/99
10	10/90
20	20/80
30	30/70
40	40/60
50	50/50
xx	none

Code	Grade
A	A grade
B	B grade
C	C grade
2	2 stage
3	3 stage

Code	In/Out Connector
0	None
1	SC
2	ST
3	FC
6	FC/APC
7	SC/APC
8	FC/UPC

Code	Fiber length
X	None
1	1 m
2	2m
A	0.5m
0	Other