Single Window Fused Splitter

Specifications

Parameter	Unit		980nm	1310nm	S band	C band	L band	C+L
Operating wavelength range Wavelength	nm	-	970-990	1270~1350 1530~1610	1420~1500	1530~1565	1570~1605	
Fiber type			HI980 HI1060	Corning SMF-28				
Insertion Loss	dB	-	See IL Table I, II, and III					
Temperature Dependent Loss (TDL)	dB/°C	Max	0.002					
Return Loss (RL)	dB	Min	50 (1x2), 55 (2x2)					
Directivity (DIR)	dB	Min	55					
Power Handling	mW	Max	300					
Operating Temperature	°C	-	-40~85					
Storage Temperature	°C	-	-40~85					
Tensile Load	N	Max	5					
Package Dimension	mm	-	Φ3x54 (Light Duty, 250 um primary coating) Φ3x60 (Medium Duty, 900 um loose tube) 95x12x10 (Heavy Duty, 2 or 3 mm cable)					

1. Values are referenced without connector loss. Operating temperature and all state of polarization effects are considered.
2. Devices built with shorter bandwidth will have better specifications and performance.
3. C specify – Customer specify.

Table I. Insertion loss of C or L band Coupler

Coupling Ratio	P Grade						A Grade					
	IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)		IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)	
	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap
99/1	≤0.18	19.0 -21.0	≤0.05	≤0.45	≤0.04	≤0.12	≤0.2	17.7 -21.5	≤0.05	≤0.55	≤0.05	≤0.15
98/2	≤0.25	16. 4-18.4	≤0.06	≤0.4	≤0.04	≤0.12	≤0.3	16. 0-19.4	≤0.07	≤0.45	≤0.05	≤0.15
97/3	≤0.3	14.6 -16.2	≤0.07	≤0.3	≤0.04	≤0.12	≤0.35	14.0 -16.8	≤0.09	≤0.4	≤0.05	≤0.15
95/5	≤0.35	12.4-13.8	≤0.08	≤0.25	≤0.04	≤0.1	≤0.4	12.0-14.4	≤0.11	≤0.3	≤0.05	≤0.15
90/10	≤0.6	9.60-10.8	≤0.1	≤0.22	≤0.05	≤0.1	≤0.65	9.20-11.2	≤0.13	≤0.26	≤0.06	≤0.14
80/20	≤1.15	6.60-7.60	≤0.11	≤0.8	≤0.05	≤0.1	≤1.15	6.40-8	≤0.16	≤0.23	≤0.07	≤0.13
70/30	≤1.75	5.00-5.50	≤0.11	≤0.16	≤0.06	≤0.1	≤1.82	4.9-5.8	≤0.16	≤0.19	≤0.08	≤0.12
60/40	≤2.5	3.95-4.30	≤0.13	≤0.15	≤0.07	≤0.09	≤2.6	3.7-4.60	≤0.17	≤0.18	≤0.08	≤0.1
50/50	2.80-3.3		≤0.15		≤0.08		2.7-3.3		≤0.17		≤0.1	

Table II. Insertion loss of 1310nm, S or C+L band Coupler

Coupling Ratio	P Grade						A Grade					
	IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)		IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)	
	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap
99/1	≤0.18	18.2 -21.0	≤0.05	≤0.9	≤0.04	≤0.15	≤0.23	17.4 -21.5	≤0.05	≤1.2	≤0.05	≤0.2
98/2	≤0.25	16. 0-18.6	≤0.05	≤0.7	≤0.04	≤0.12	≤0.3	15.2-19.8	≤0.05	≤1.0	≤0.05	≤0.15
97/3	≤0.3	14.4 -16.4	≤0.06	≤0.6	≤0.04	≤0.12	≤0.34	13.7 – 17.1	≤0.07	≤0.9	≤0.05	≤0.15
95/5	≤0.35	12.2-14	≤0.08	≤0.5	≤0.04	≤0.1	≤0.4	11.8-14.7	≤0.08	≤0.8	≤0.05	≤0.15
90/10	≤0.6	9.40-11.0	≤0.1	≤0.4	≤0.05	≤0.1	≤0.65	9.00-11.3	≤0.1	≤0.6	≤0.06	≤0.15
80/20	≤1.15	6.30-7.80	≤0.11	≤0.37	≤0.05	≤0.1	≤1.15	6.0-8.1	≤0.15	≤0.55	≤0.07	≤0.14
70/30	≤1.75	4.6-5.75	≤0.15	≤0.35	≤0.06	≤0.1	≤1.82	4.7-5.9	≤0.2	≤0.5	≤0.08	≤0.13
60/40	≤2.5	3.85-4.40	≤0.2	≤0.3	≤0.07	≤0.09	≤2.6	3.7-4.60	≤0.3	≤0.45	≤0.09	≤0.11
50/50	2.70-3.4		≤0.25		≤0.08		2.6-3.5		≤0.4		≤0.1	

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Table III. Insertion loss of 980nm Coupler

Coupling Ratio	P Grade						A Grade					
	IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)		IL[1] (dB)		WDL[2] (dB)		PDL[3] (dB)	
	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap
99/1	≤0.2	18.5 -21.0	≤0.1	≤1.0	≤0.05	≤0.12	≤0.25	15.5 -21.5	≤0.15	≤1.2	≤0.07	≤0.15
95/5	≤0.38	11.4-14.8	≤0.2	≤0.9	≤0.05	≤0.12	≤0.5	11.2-15.2	≤0.25	≤1.1	≤0.07	≤0.15
90/10	≤0.6	9.2-11.3	≤0.25	≤0.7	≤0.07	≤0.12	≤0.7	8.7-11.7	≤0.35	≤0.75	≤0.1	≤0.15
80/20	≤1.3	5.7-7.9	≤0.25	≤0.6	≤0.1	≤0.12	≤1.5	5.40-8.5	≤0.35	≤0.75	≤0.1	≤0.15
70/30	≤1.9	4.3-6.0	≤0.35	≤0.5	≤0.1	≤0.1	≤2.2	4.2-6.4	≤0.45	≤0.65	≤0.1	≤0.15
60/40	≤2.6	3.4-4.70	≤0.35	≤0.4	≤0.1	≤0.1	≤2.8	3.2-4.7	≤0.45	≤0.55	≤0.1	≤0.15
50/50	2.70-3.4		≤0.3		≤0.1		2.6-3.6		≤0.45		≤0.15	

1. Insertion loss over operating wavelength range at ~23C (excluding PDL and TDL).
2. Insertion loss change over the specified wavelength range.
3. Insertion loss change over the all input polarization status.

Ordering Information

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Center Wavelength	Band Width	Coupling Ratio	Port Config.	Device Packaging
3 – 1310 nm 4 – 1480 nm 5 – 1550 nm 7 – 1570 nm 9 – 980 nm	1 - ±10 nm 2 - ± 20 nm 3 - ± 30 nm 4 - ± 40 nm	01 – 99/01 02 – 98/02 ------ 50 – 50/50	1 – 1x2 2 – 2x2	L – Light Duty M – Medium Duty H – Heavy Duty

Fiber Type	Fiber Jacket	Fiber Length	Connector Type
1 – Corning SMF-28 2 – Corning HI 1060 3 – Corning HI 980	1 – 250 µm 2 – 2 mm 3 – 3 mm 6 – 1.6 mm 9 – 900 µm	1 ≥ 1m X - C specify	0 – None 1 – FC/UPC 2 – FC/APC 3 – SC/UPC 4 – SC/APC 5 – LC 6 – MU X - C Specify

i.e. : **SWST-34051L-1110**

SWST – 1310 nm, ±40nm band width, 95/5 coupling ratio, 1x2, light duty – Corning SMF-28 fiber, 250 µm diameter, 1m pigtail length, no connector.

Contact Information

For more information about BATi's' leadership in variable optical attenuation and modulation technology and other optical networking modules and components, visit our website at www.bostonati.com.

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