

Melbye Raycore Taiwan Co., Ltd.



The Raycore fused dual window wideband fiber 1x2 (2x2) splitters provide accurate optical signal coupling and splitting over wide bandwidth with high performance and high reliability. These splitters have excellent uniformity, low excess loss and very low polarization sensitivity and are available with various tap ratios, fiber types, and connector options. All devices are shown to be able to handle high optical power up to 4W and are tested according to industry standard procedures. Reliability is guaranteed through stringent tests to fully meet Telcordia GR-1221 requirements.

## Specifications

Optical Specifications

ASP Series	Specifications	Unit
Wavelength Range	1310 ±40 and 1550 ±40	nm
Fiber Type	Corning SMF-28	
Insertion Loss [1]	See Insertion Loss Table	dB
Return Loss [1] (Min)	55	dB
Directivity (Min)	55	dB
TDL [2] Max	Signal Path: <0.10 dB, Tap Path: <0.15 dB	dB
Maximum Power Handling	4	$\mathbb{W}$
Operating Temperature Range [3]	-40 to + 75	°C
Storage Temperature Range	-40 to + 85	°C
Package Dimensions [4]	P1: 250µm bare fiber (Ø) 3.0 X (L) 47.0	mm
	P2: 900µm loose tube (Ø) X (L) 60.0	
Qualifications	Telcordia GR-1221	

Note:

- 1. Values are referenced without connector loss and every connector will add 0.2dB loss.
- 2. Temperature Sensitivity Coefficient ~0.002dB/°C at the range of –5 to 75°C.
- 3. Operating temperature range changes to -5 to 75°C in P2, P3 package and all package with connectors.
- 4. The mechanical tolerance should be +/- 0.2 mm on all package dimensions unless otherwise custom specified.





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Insertion Loss (IL)

Coupling	P Grade						
	IL [1] (dB)		PDL [2	PDL [2] (dB)			
Ratio	Signal	Тар	Signal	Тар			
99/01	≤0.25	18.0-22.5	≤0.05	≤0.20			
95/05	≤0.45	11.8-15.0	≤0.10	≤0.20			
90/10	≤0.65	9.60-11.30	≤0.10	≤0.15			
85/15	≤0.98	7.80-9.40	≤0.10	≤0.15			
80/20	≤1.25	6.50-7.85	≤0.15	≤0.15			
75/25	≤1.60	5.50-6.80	≤0.15	≤0.15			
70/30	≤2.00	4.70-6.00	≤0.15	≤0.15			
65/35	≤2.10	4.30-5.20	≤0.15	≤0.15			
60/40	≤2.70	3.50-4.70	≤0.15	≤0.15			
55/45	≤3.00	3.00-4.20	≤0.15.	≤0.15			
50/50	2.70-3.60		≤0.15		≤0.70		

1. Insertion loss over operating wavelength range at ~23°C (excluding PDL and TDL).

2. Insertion loss change over the all input polarization states.

## Ordering Information

	<u>In</u>	<u>Out</u>	<u>Connectors</u>	<u>Coupling</u> — <u>Ratios</u>	Fiber type	<u>Length</u>		
ASPF -							_	00
	1:1 port	02:2 ports	1: SC/UPC	01: 1:99	B: Bare Fiber			
	2: 2 port		2: SC/APC	05: 5:95	9: 900µm	÷		
			3: LC/UPC	10:10:90		05: 50 cm		
			4: LC/APC	15: 15:85		:		
			7: FC/UPC	20: 20:80		10:1.0 M		
			8: FC/APC	25: 25:75		:		
			0: no connector	30: 30:70		15: 1.5 M		
				35: 35:65		÷		
				40: 40:60		20: 2.0M		
				45: 45:55				
				50: 50:50				

\* The tolerance of fiber length is +/-0.1m. 1 meter is standard.

