

# Coaxial Power Splitter/Combiner

3 Way-0° 75Ω 1 to 1000 MHz

ZFSC-3-4-75+  
ZFSC-3-4-75



## Maximum Ratings

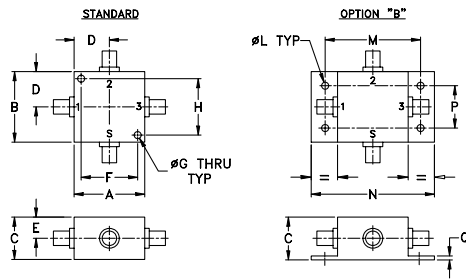
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

## Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
1.25	1.25	.75	.63	.38	1.000	.125	1.000	
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40	
J	K	L	M	N	P	Q	wt	
--	--	.125	1.688	2.18	.75	.07	grams	
--	--	3.18	42.88	55.37	19.05	1.78	75.0	

For option B with N-Type connectors, dimension "C" increases to 0.94 inches.

## Features

- very wideband, 1 to 1000 MHz
- low insertion loss, 0.4 dB typ.
- good isolation, 27 dB typ.
- rugged shielded case

## Applications

- cellular
- instrumentation
- communication system

## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 4.8 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L Typ.	M Min.	U Typ.	L Typ.	M Max.	U Typ.	L Max.	M Max.	U Max.	L Max.	M Max.	U Max.						
1-1000	34	22	27	17	23	15	0.2	0.5	0.4	1.2	1.2	2.0	3.0	6.0	10	0.5	0.7	0.9

L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

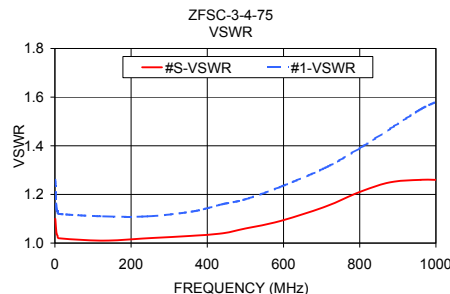
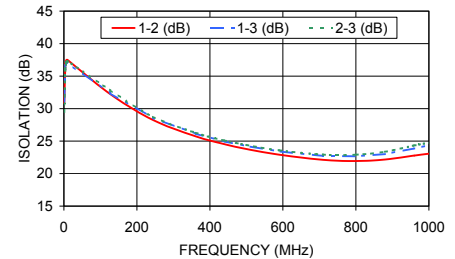
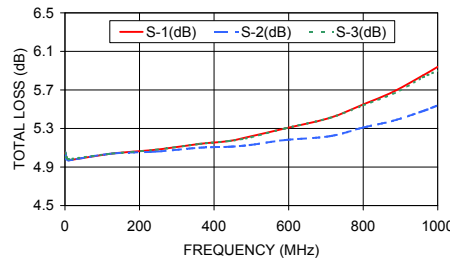
## Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
1.00	5.05	5.05	5.05	0.00	30.83	31.08	29.50	0.03	1.10	1.26	1.27	1.27
4.20	5.00	4.98	5.00	0.02	36.92	36.71	36.08	0.04	1.04	1.14	1.14	1.14
7.00	4.98	4.98	4.98	0.00	37.49	37.09	37.06	0.06	1.03	1.13	1.13	1.13
10.00	4.97	4.97	4.98	0.01	37.49	37.02	37.30	0.04	1.02	1.12	1.12	1.12
127.00	5.04	5.04	5.04	0.00	32.23	32.37	32.81	0.12	1.01	1.11	1.11	1.11
244.00	5.08	5.06	5.08	0.02	28.25	28.57	28.74	0.20	1.02	1.11	1.11	1.11
361.00	5.14	5.10	5.14	0.04	25.73	26.13	26.28	0.46	1.03	1.13	1.12	1.13
440.00	5.17	5.11	5.17	0.06	24.53	24.94	25.09	0.43	1.04	1.16	1.14	1.15
500.00	5.22	5.13	5.21	0.09	23.79	24.25	24.41	0.55	1.06	1.18	1.16	1.18
590.00	5.30	5.18	5.30	0.13	22.91	23.42	23.58	0.59	1.09	1.23	1.20	1.23
710.00	5.41	5.22	5.41	0.19	22.12	22.71	22.92	0.77	1.15	1.31	1.27	1.31
800.00	5.55	5.31	5.54	0.24	21.94	22.67	22.91	0.83	1.21	1.39	1.33	1.39
880.00	5.68	5.38	5.66	0.30	22.17	23.01	23.36	0.87	1.25	1.47	1.40	1.46
960.00	5.85	5.48	5.83	0.37	22.78	23.88	24.33	0.90	1.26	1.55	1.46	1.54
1000.00	5.94	5.54	5.90	0.40	23.07	24.36	24.75	0.84	1.26	1.58	1.49	1.58

ZFSC-3-4-75 TOTAL LOSS

1. Total Loss = Insertion Loss + 4.8dB splitter loss.

ZFSC-3-4-75 ISOLATION



## electrical schematic



For detailed performance specs & shopping online see web site

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