

Coaxial Power Splitter/Combiner

8 Way-0° 75Ω 0.5 to 175 MHz

ZFSC-8-1-75+

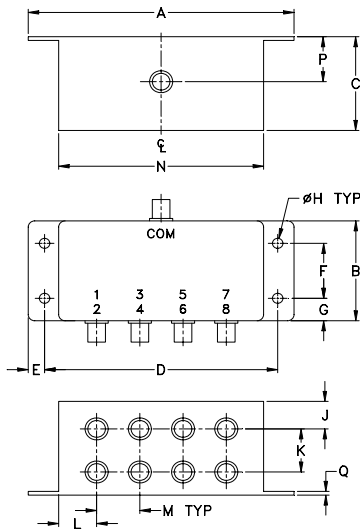
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,4,5,6,7,8	1,2,3,4,5,6,7,8

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
4.06	1.60	1.57	3.56	.24	.88	.36	.160
103.12	40.64	39.88	90.42	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt.
.43	.69	.58	.66	3.13	.79	.13	grams
10.92	17.53	14.73	16.76	79.50	20.07	3.30	200

Features

- low insertion loss, 0.6 dB typ.
- good isolation, 30 dB typ.
- rugged shielded case

Applications

- HF/VHF
- radio communication
- federal and defense communication



CASE STYLE: R29
Connectors Model
BNC ZFSC-8-1-75+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

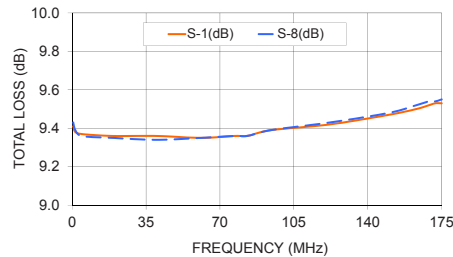
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 9.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L		M		U	
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
0.5-175	25	20	30	20	25	20	0.5	1.0	0.6	1.1	0.7	1.3	1.0	2.5	5.0	0.2	0.3	0.5

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]

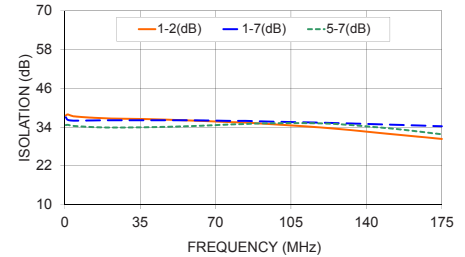
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)						Amp. Unbal. (dB)	Isolation (dB)				Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-7	3-4	5-7				
0.50	9.41	9.44	9.41	9.44	9.43	9.43	0.09	37.59	37.02	34.87	34.62	0.98	1.56	1.09	1.09
1.50	9.38	9.41	9.38	9.41	9.40	9.39	0.12	37.91	36.21	35.08	34.69	0.50	1.58	1.04	1.04
4.38	9.37	9.38	9.37	9.38	9.37	9.36	0.13	37.32	35.99	34.77	34.34	0.21	1.60	1.02	1.02
19.00	9.36	9.33	9.36	9.32	9.36	9.35	0.13	36.71	36.11	34.21	33.88	0.92	1.56	1.01	1.01
40.00	9.36	9.30	9.36	9.30	9.35	9.34	0.10	36.44	36.12	34.14	33.98	1.16	1.44	1.02	1.03
61.00	9.35	9.26	9.35	9.26	9.35	9.35	0.10	35.97	36.09	34.45	34.36	0.89	1.32	1.04	1.04
77.00	9.36	9.29	9.36	9.29	9.36	9.36	0.08	35.54	35.92	34.72	34.82	0.79	1.25	1.05	1.05
83.00	9.36	9.28	9.36	9.28	9.37	9.36	0.08	35.41	35.93	34.77	34.94	0.72	1.23	1.05	1.06
94.00	9.39	9.30	9.39	9.30	9.39	9.39	0.09	34.98	35.72	34.93	35.18	0.68	1.19	1.06	1.06
122.00	9.42	9.33	9.42	9.33	9.43	9.43	0.10	33.72	35.31	34.50	35.08	0.51	1.10	1.07	1.08
150.00	9.47	9.38	9.47	9.38	9.48	9.48	0.11	31.93	34.78	32.94	33.65	0.65	1.07	1.09	1.10
163.00	9.50	9.41	9.51	9.41	9.52	9.52	0.11	31.10	34.52	31.95	32.72	0.75	1.09	1.09	1.11
169.00	9.52	9.43	9.53	9.43	9.54	9.54	0.12	30.74	34.39	31.47	32.24	0.76	1.11	1.10	1.11
172.00	9.53	9.43	9.53	9.43	9.54	9.54	0.11	30.53	34.30	31.23	32.00	0.80	1.12	1.10	1.11
175.00	9.53	9.44	9.54	9.44	9.56	9.55	0.12	30.33	34.25	31.03	31.79	0.78	1.13	1.10	1.11

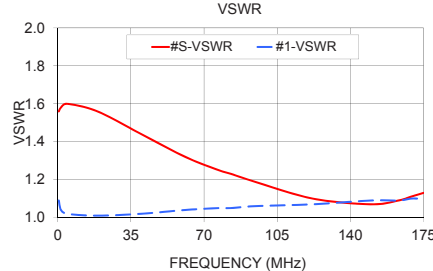
ZFSC-8-1-75+ 1. Total Loss = Insertion Loss + 9dB splitter loss.



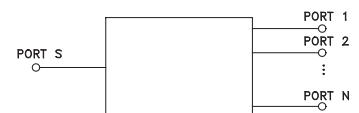
ZFSC-8-1-75+ ISOLATION



ZFSC-8-1-75+ VSWR



electrical schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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