Coaxial

Power Splitter/Combiner

ZFSC-8-1-75+

8 Way-0° 75Ω 0.5 to 175 MHz

Generic photo used for illustration purposes only

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

Maximum Ratings

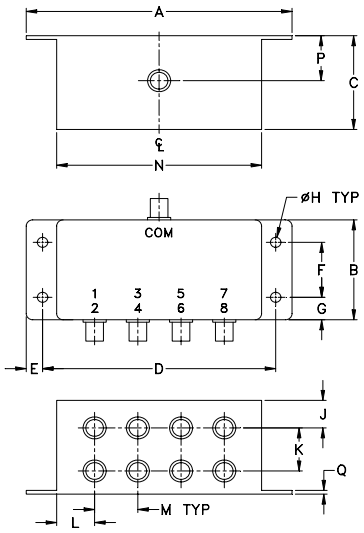
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.

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

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	L	M	U
f_L-f_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

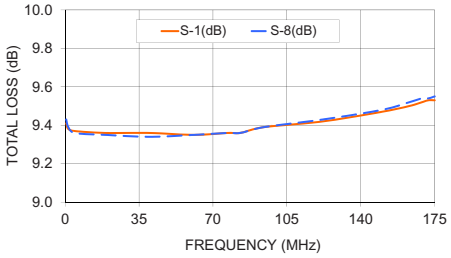
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]

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

1. Total Loss = Insertion Loss + 9dB splitter loss.

ZFSC-8-1-75+
TOTAL LOSS



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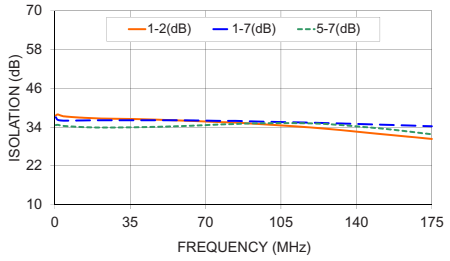
ISOLATION



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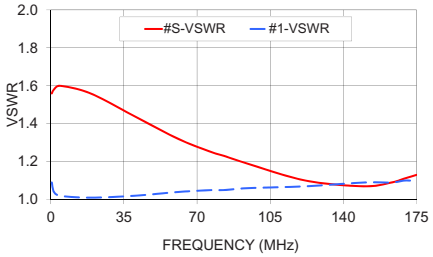
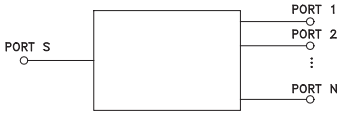
VSWR



electrical schematic



Notes

A. 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.
B. 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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