

Coaxial

Power Splitter/Combiner

8 Way-0° 50Ω 0.5 to 175 MHz

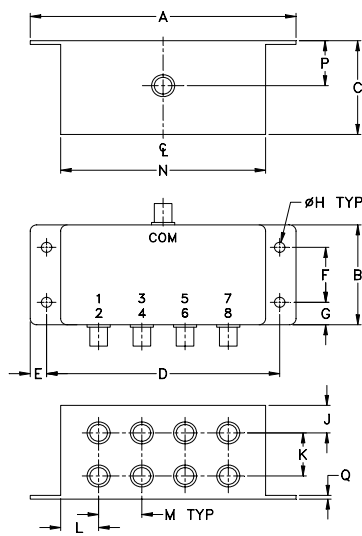
Maximum Ratings

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, 0.8 dB typ.
- high isolation, 30 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- rugged shielded case

Applications

- HF/VHF
- radio communication
- instrumentation



BNC version shown
CASE STYLE: R29

Connectors	Model
BNC	ZFSC-8-1+
SMA	ZFSC-8-1-S(+)

+RoHS Compliant

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

Electrical Specifications

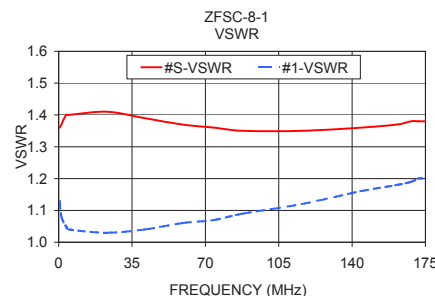
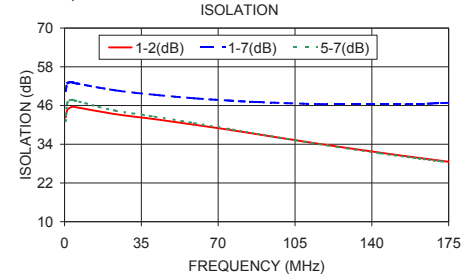
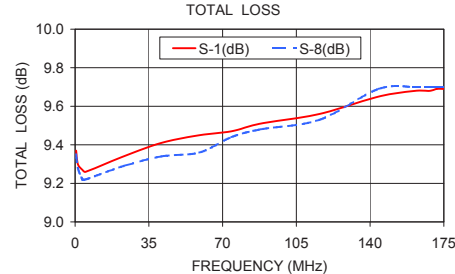
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 9.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L		M		U	
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f_L - f_U																		
0.5-175	30	25	30	20	25	18	0.8	1.2	0.8	1.2	1.0	1.6	1.0	2.5	5.0	0.2	0.2	0.3

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]

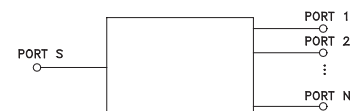
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)						Amplitude Unbalance (dB)	Isolation (dB)				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	9.37	9.37	9.37	9.38	9.37	9.35	0.05	42.28	50.46	40.88	41.14	1.36	1.13	1.15
1.30	9.30	9.29	9.31	9.31	9.29	9.28	0.03	44.69	52.85	45.42	46.94	1.37	1.08	1.09
3.50	9.27	9.25	9.26	9.26	9.25	9.22	0.05	45.61	53.16	46.49	47.81	1.40	1.05	1.05
5.00	9.26	9.25	9.27	9.25	9.24	9.22	0.05	45.50	52.91	46.27	47.48	1.40	1.04	1.04
23.00	9.34	9.32	9.35	9.32	9.34	9.29	0.05	43.35	50.73	43.83	44.43	1.41	1.03	1.03
41.00	9.41	9.33	9.41	9.35	9.39	9.34	0.07	41.77	49.33	42.26	42.58	1.39	1.04	1.04
59.00	9.45	9.34	9.45	9.35	9.42	9.36	0.11	40.06	48.24	40.68	40.54	1.37	1.06	1.06
74.20	9.47	9.38	9.48	9.37	9.48	9.44	0.11	38.58	47.56	39.14	38.81	1.36	1.07	1.08
88.00	9.51	9.41	9.50	9.39	9.52	9.48	0.13	37.09	47.08	37.71	37.21	1.35	1.09	1.09
116.00	9.56	9.45	9.58	9.42	9.57	9.53	0.17	34.12	46.45	34.64	34.02	1.35	1.12	1.13
144.00	9.65	9.57	9.67	9.55	9.71	9.69	0.16	31.37	46.34	31.78	31.18	1.36	1.16	1.17
161.40	9.68	9.59	9.69	9.56	9.73	9.70	0.17	29.77	46.45	30.13	29.59	1.37	1.18	1.19
168.20	9.68	9.59	9.70	9.56	9.73	9.70	0.17	29.17	46.67	29.49	29.00	1.38	1.19	1.20
171.60	9.69	9.60	9.71	9.57	9.74	9.70	0.17	28.88	46.78	29.18	28.70	1.38	1.20	1.20
175.00	9.69	9.61	9.72	9.58	9.73	9.70	0.16	28.57	46.82	28.88	28.40	1.38	1.20	1.21

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



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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