

Power Splitter/Combiner

ZFSC-6-1+

6 Way-0° 50Ω 1 to 175 MHz

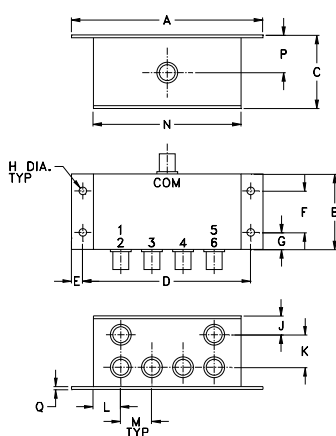
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.5W max.
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

SUM PORT	S
PORT 1,2,3,4,5,6	1,2,3,4,5,6

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	.8	.125	grams
10.92	17.53	14.73	16.76	79.50	20.32	3.18	190.0

Features

- low insertion loss, 0.75 dB typ.
- good isolation, 26 dB typ.
- rugged shielded case

Applications

- VHF
- receivers and transmitters



BNC version shown

CASE STYLE: Q28

Connectors	Model
BNC	ZFSC-6-1+
SMA	ZFSC-6-1-S+

+RoHS Compliant

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

Electrical Specifications

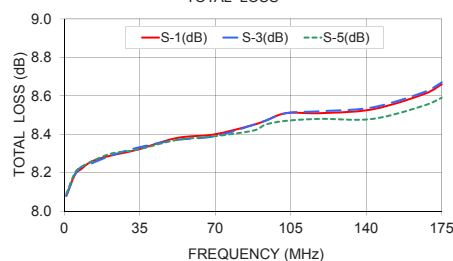
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 7.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			VSWR (:1)			
	L		M		U		L		M		U		L			L			S		OUT	
f_L - f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Typ.	Max.	Typ.	Max.
1-175	27	22	26	20	26	20	0.75	1.0	0.75	1.2	0.8	1.2	2	6	12	0.2	0.4	0.6	—	—	—	—

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]

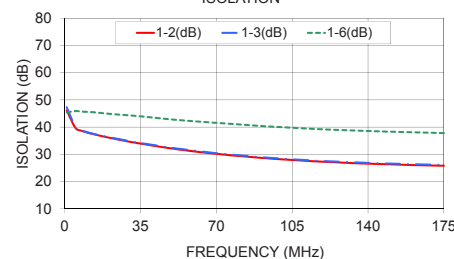
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3	1-6				
1.00	8.08	8.08	8.09	0.03	46.12	47.26	45.41	0.06	1.07	1.08	1.08
5.00	8.19	8.19	8.20	0.03	39.73	39.76	45.89	0.06	1.08	1.04	1.04
8.00	8.22	8.23	8.23	0.03	38.61	38.66	45.69	0.07	1.09	1.04	1.04
13.00	8.26	8.25	8.26	0.03	37.46	37.56	45.47	0.24	1.10	1.04	1.04
22.00	8.29	8.29	8.30	0.03	35.88	36.04	44.79	0.24	1.12	1.02	1.02
34.00	8.32	8.33	8.32	0.03	34.07	34.26	44.03	0.38	1.15	1.02	1.02
52.00	8.38	8.37	8.37	0.03	31.86	32.09	42.63	0.61	1.18	1.02	1.03
70.00	8.40	8.39	8.39	0.02	30.17	30.40	41.57	0.74	1.21	1.03	1.03
88.00	8.45	8.45	8.42	0.03	28.88	29.12	40.56	0.93	1.23	1.03	1.04
93.25	8.47	8.47	8.45	0.03	28.55	28.80	40.28	1.01	1.23	1.03	1.04
103.00	8.51	8.51	8.47	0.04	28.02	28.28	39.85	1.12	1.23	1.02	1.03
119.00	8.51	8.52	8.48	0.04	27.29	27.54	39.19	1.32	1.24	1.01	1.02
143.00	8.53	8.54	8.48	0.06	26.48	26.77	38.49	1.46	1.26	1.01	1.01
167.00	8.61	8.62	8.55	0.08	25.94	26.24	37.97	1.76	1.27	1.03	1.02
175.00	8.66	8.67	8.59	0.08	25.82	26.13	37.80	1.91	1.26	1.03	1.03

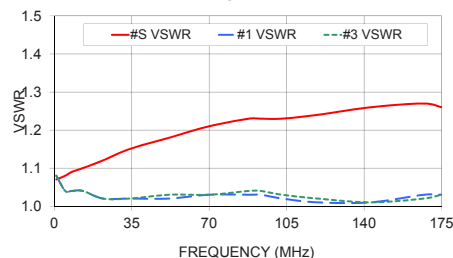
ZFSC-6-1+ TOTAL LOSS 1. Total Loss = Insertion Loss + 7.8dB splitter loss.



ZFSC-6-1+ ISOLATION



ZFSC-6-1+ 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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