

# Power Splitter/Combiner

## ZFSC-6-1+ ZFSC-6-1

6 Way-0° 50Ω 1 to 175 MHz

### Maximum Ratings

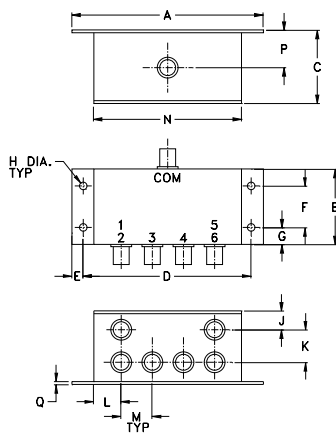
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.5W max.

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	1.50	3.56	.24	.88	.36	.160
103.12	40.64	38.10	90.42	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt
.4	.69	.58	.66	3.13	.8	.06	grams
10.16	17.53	14.73	16.76	79.50	20.32	1.52	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	Price	Qty.
BNC	ZFSC-6-1(+)	\$99.95	(1-9)
SMA	ZFSC-6-1-S(+)	\$114.95	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

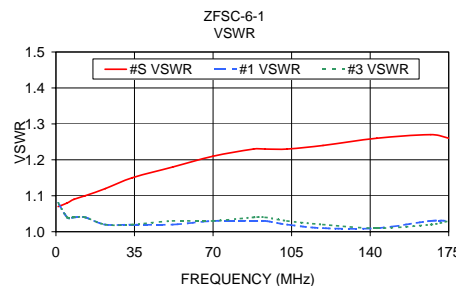
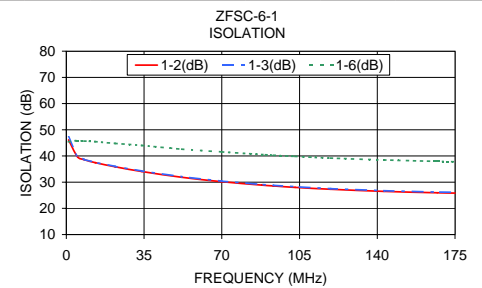
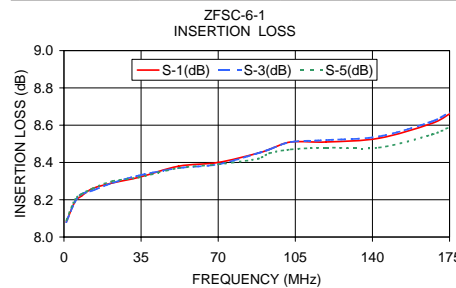
### Electrical Specifications

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	M	U	L	M	U	S	OUT								
$f_L$ - $f_U$	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	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)	Insertion Loss (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



### electrical schematic



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

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