

# Coaxial Power Splitter/Combiner

## ZFSC-5-1+

5 Way-0° 50Ω 1 to 300 MHz

### Maximum Ratings

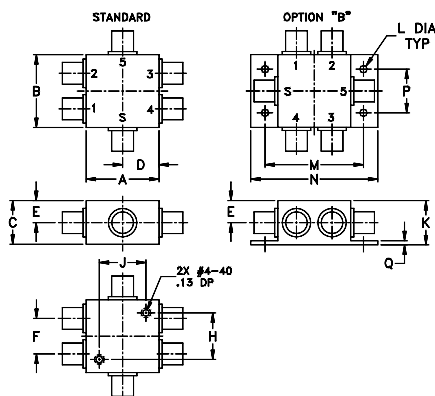
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

### Coaxial Connections

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

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	.61	--	.80
31.75	31.75	19.05	16.00	9.65	15.49	--	20.32
J	K	L	M	N	P	Q	wt
.80	.76	.125	1.688	2.18	.75	.07	grams
20.32	19.30	3.18	42.88	55.37	19.05	1.78	85.0

### Features

- low insertion loss, 0.6 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- rugged shielded case

### Applications

- VHF
- instrumentation
- communications system



BNC version shown  
CASE STYLE: G1170

Connectors	Model
BNC	ZFSC-5-1+
SMA	ZFSC-5-1-S+
BRACKET (OPTION "B")	

**+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 7.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		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.
$f_L$ - $f_U$	25	20	23	18	20	17	0.2	0.5	0.6	1.0	1.5	2.0	2	4	8	0.2	0.3	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  $f_U$ ]

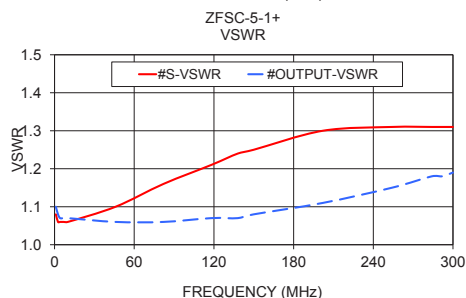
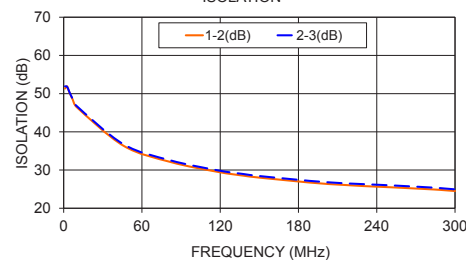
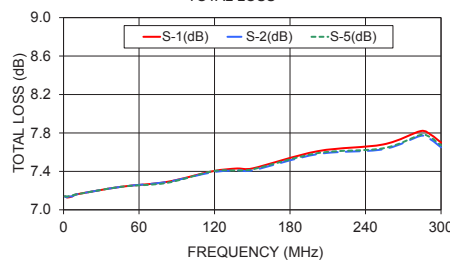
### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)					Amp. Unbal. (dB)	Isolation (dB)				Phase Unbal. (deg.)	VSWR S	VSWR OUTPUTS	
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	2-5	3-4				
1.00	7.14	7.14	7.15	7.15	7.14	0.00	51.33	51.91	37.56	49.97	0.07	1.08	1.10	
2.60	7.13	7.13	7.13	7.13	7.14	0.01	51.90	51.80	39.59	51.00	0.04	1.06	1.08	
4.20	7.13	7.14	7.14	7.14	7.14	0.01	50.50	50.57	39.90	49.85	0.04	1.06	1.07	
7.00	7.14	7.14	7.14	7.15	7.15	0.00	48.39	48.53	39.74	47.90	0.04	1.06	1.07	
10.00	7.16	7.16	7.15	7.16	7.16	0.01	46.46	46.75	39.40	46.14	0.07	1.06	1.07	
46.00	7.24	7.24	7.23	7.24	7.24	0.01	36.33	36.72	35.07	36.29	0.24	1.10	1.06	
82.00	7.29	7.29	7.28	7.28	7.28	0.01	32.10	32.52	32.12	32.16	0.29	1.16	1.06	
118.00	7.40	7.39	7.38	7.37	7.40	0.03	29.53	29.93	30.08	29.63	0.43	1.21	1.07	
138.00	7.43	7.41	7.40	7.40	7.41	0.03	28.52	28.95	29.27	28.63	0.52	1.24	1.07	
150.00	7.43	7.41	7.41	7.40	7.42	0.03	28.02	28.43	28.86	28.13	0.51	1.25	1.08	
202.00	7.61	7.58	7.56	7.55	7.59	0.06	26.36	26.81	27.56	26.48	0.78	1.30	1.11	
254.00	7.68	7.63	7.62	7.60	7.64	0.08	25.44	25.94	27.07	25.58	0.98	1.31	1.15	
284.00	7.82	7.77	7.76	7.73	7.78	0.09	24.91	25.38	26.83	25.00	1.09	1.31	1.18	
292.00	7.78	7.73	7.71	7.68	7.75	0.10	24.72	25.17	26.71	24.79	1.18	1.31	1.18	
300.00	7.70	7.65	7.62	7.61	7.67	0.10	24.51	24.95	26.55	24.56	1.18	1.31	1.19	

ZFSC-5-1+  
TOTAL LOSS

1. Total Loss = Insertion Loss + 7dB splitter loss.

ZFSC-5-1+  
ISOLATION



### 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.
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