

Coaxial

# Power Splitter/Combiner

## ZFSC-2-1+

2 Way-0° 50Ω 5 to 500 MHz



### Maximum Ratings

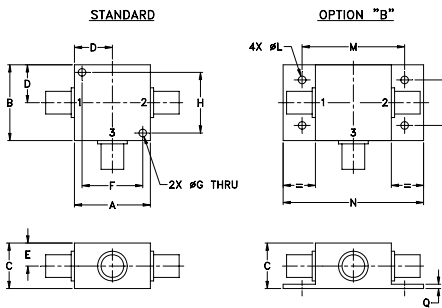
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

### Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	wt
1.25	1.25	.75	.63	.38	1.00	.125	1.000	--	--	.125	1.688	2.18	.75	.07	grams
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40	--	--	3.18	42.88	55.37	19.05	1.78	70.0

For option B with N-type connectors, dimension "C" increases to 0.94 inches.

### Features

- wideband, 5 to 500 MHz
- low insertion loss, 0.3 dB typ.
- excellent isolation, 28 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- good VSWR, 1.2:1 typ.
- rugged shielded case

### Applications

- VHF/UHF
- instrumentation
- communication systems

BNC version shown  
CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFSC-2-1+	\$44.95	(1-9)
SMA	ZFSC-2-1-S+	\$49.95	(1-9)
N-TYPE	ZFSC-2-1-N+	\$49.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

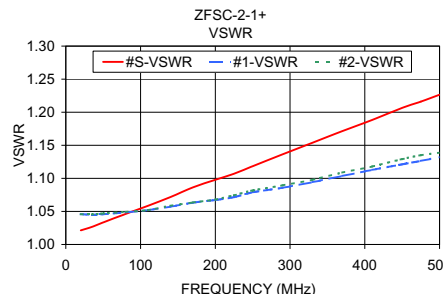
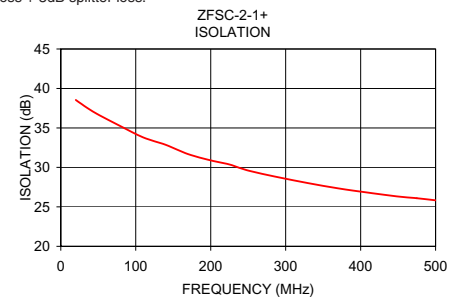
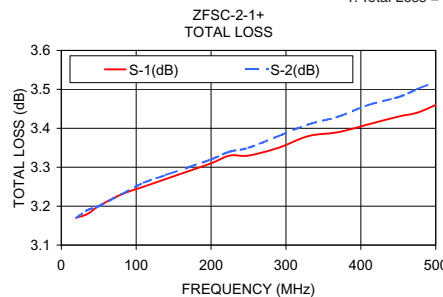
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
$f_L$ - $f_U$																		
5-500	30	25	28	20	25	20	0.2	0.5	0.3	0.6	0.6	0.8	2	4	4	0.15	0.15	0.30

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 <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
20	3.17	3.17	0.00	38.54	0.08	1.02	1.05	1.05
35	3.18	3.19	0.00	37.55	0.05	1.03	1.04	1.05
80	3.23	3.23	0.00	35.20	0.01	1.05	1.05	1.05
140	3.27	3.28	0.01	32.86	0.01	1.07	1.06	1.06
170	3.29	3.30	0.01	31.68	0.03	1.09	1.06	1.06
200	3.31	3.32	0.01	30.89	0.05	1.10	1.07	1.07
225	3.33	3.34	0.02	30.37	0.09	1.11	1.07	1.07
250	3.33	3.35	0.02	29.60	0.08	1.12	1.08	1.08
290	3.35	3.38	0.03	28.75	0.13	1.14	1.09	1.09
330	3.38	3.41	0.03	28.01	0.17	1.15	1.09	1.10
370	3.39	3.43	0.04	27.35	0.21	1.17	1.10	1.11
410	3.41	3.46	0.05	26.80	0.25	1.19	1.11	1.12
450	3.43	3.48	0.05	26.31	0.30	1.21	1.12	1.13
475	3.44	3.50	0.06	26.09	0.32	1.22	1.13	1.14
500	3.46	3.52	0.06	25.83	0.34	1.23	1.13	1.14

1. Total Loss = Insertion Loss + 3dB splitter loss.



### electrical schematic



For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

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