

Coaxial Power Splitter/Combiner

3 Way-0° 50Ω 1 to 500 MHz

ZFSC-3-1+ ZFSC-3-1



BNC version shown
CASE STYLE: J17

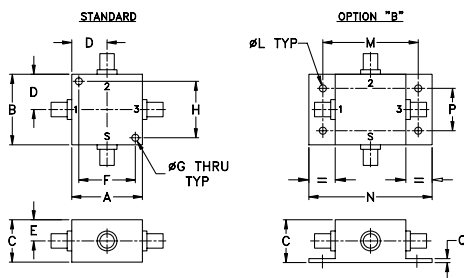
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.375W max.

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	75.0

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

Features

- wideband, 1 to 500 MHz
- low insertion loss, 0.5 dB typ.
- high isolation, 30 dB typ.
- rugged, shielded case

Applications

- VHF/UHF
- instrumentation
- communication system

Connectors	Model	Price	Qty.
BNC	ZFSC-3-1(+)	\$51.95	(1-9)
SMA	ZFSC-3-1-S(+)	\$56.95	(1-9)
N-TYPE	ZFSC-3-1-N(+)	\$56.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

+ 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.

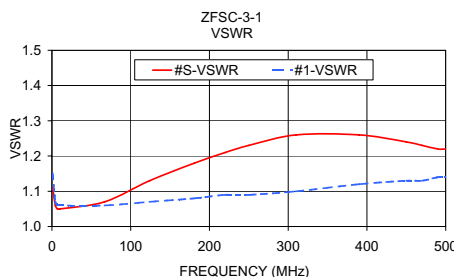
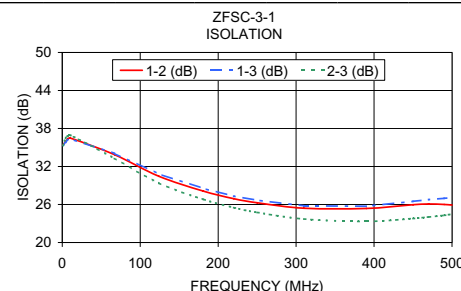
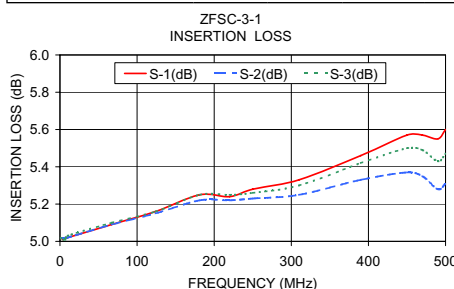
Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 4.8 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																		
1-500	30	20	30	20	25	18	0.4	0.75	0.5	0.9	0.8	1.2	2.0	3.0	4.0	0.2	0.3	0.4

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)	Insertion Loss (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
1.00	5.02	5.02	5.02	0.00	35.42	35.35	35.32	0.03	1.11	1.15	1.15	1.15
4.20	5.01	5.02	5.01	0.01	35.93	35.81	36.47	0.03	1.06	1.07	1.07	1.07
7.00	5.02	5.02	5.01	0.00	36.31	36.18	36.81	0.07	1.05	1.06	1.06	1.06
10.00	5.02	5.02	5.03	0.01	36.50	36.38	36.98	0.10	1.05	1.06	1.06	1.06
67.00	5.09	5.09	5.10	0.01	33.88	34.07	33.28	0.56	1.07	1.06	1.06	1.07
124.00	5.16	5.15	5.16	0.01	30.45	30.83	29.38	1.09	1.13	1.07	1.08	1.08
181.00	5.25	5.22	5.25	0.02	28.12	28.54	26.82	1.49	1.18	1.08	1.09	1.10
220.00	5.24	5.22	5.25	0.03	26.92	27.33	25.52	1.71	1.21	1.09	1.10	1.11
250.00	5.28	5.23	5.26	0.06	26.28	26.69	24.76	1.91	1.23	1.09	1.11	1.12
310.00	5.33	5.25	5.30	0.08	25.41	25.80	23.71	2.16	1.26	1.10	1.12	1.15
390.00	5.46	5.33	5.42	0.14	25.38	25.74	23.33	2.50	1.26	1.12	1.13	1.17
450.00	5.57	5.37	5.50	0.20	25.97	26.51	23.79	2.80	1.24	1.13	1.12	1.19
470.00	5.57	5.35	5.49	0.22	26.08	26.78	24.04	3.14	1.23	1.13	1.12	1.19
490.00	5.55	5.28	5.43	0.27	26.00	26.98	24.29	3.41	1.22	1.14	1.12	1.19
500.00	5.60	5.31	5.47	0.29	25.91	27.09	24.49	3.49	1.22	1.14	1.12	1.19



electrical schematic



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