

Coaxial

Power Splitter/Combiner

ZFSC-3-1W+

3 Way-0° 50Ω 2 to 750 MHz

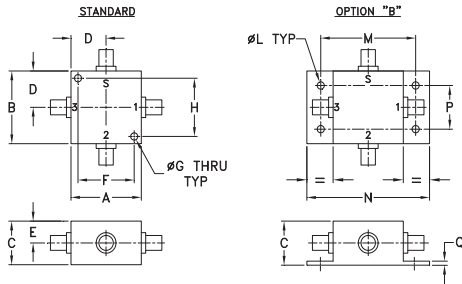
Maximum Ratings

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

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	1.000	.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	75.0

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

Features

- wideband, 2 to 750 MHz
- low insertion loss, 0.5 dB typ.
- high isolation, 30 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation
- communication style



BNC version shown
CASE STYLE: J17

Connectors	Model
BNC	ZFSC-3-1W+
SMA	ZFSC-3-1W-S+
N-TYPE	ZFSC-3-1W-N+
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 4.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L		M		U	
f_L - f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
2-750	30	20	30	20	25	18	0.4	0.75	0.5	1.0	1.0	1.6	3.0	5.0	7.0	0.2	0.3	0.5

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]

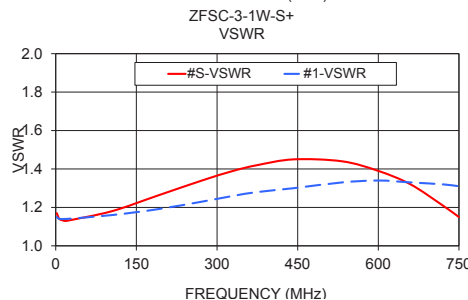
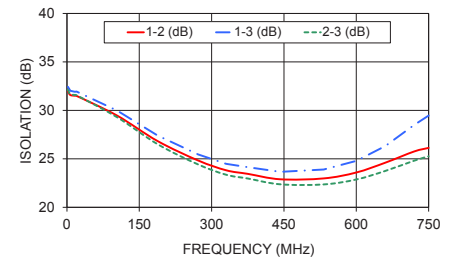
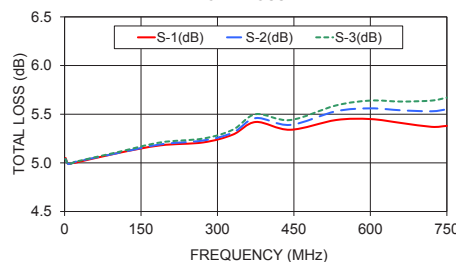
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR			
	S-1	S-2	S-3		1-2	1-3	2-3		S	1	2	3
2.00	5.05	5.04	5.04	0.00	31.97	32.43	32.13	0.05	1.17	1.15	1.15	1.15
6.80	4.99	4.99	4.99	0.00	31.59	32.02	31.67	0.02	1.14	1.14	1.15	1.14
16.40	5.00	5.00	5.00	0.00	31.51	31.92	31.59	0.03	1.13	1.14	1.15	1.14
20.00	5.00	5.01	5.01	0.01	31.49	31.94	31.56	0.03	1.13	1.14	1.15	1.14
104.00	5.10	5.10	5.11	0.01	29.46	29.98	29.29	0.06	1.18	1.16	1.16	1.16
188.00	5.18	5.19	5.21	0.02	26.83	27.40	26.51	0.11	1.26	1.19	1.20	1.19
272.00	5.21	5.23	5.25	0.04	24.83	25.45	24.42	0.10	1.34	1.23	1.24	1.23
330.00	5.29	5.31	5.34	0.05	23.82	24.48	23.36	0.09	1.39	1.26	1.27	1.26
375.00	5.42	5.46	5.50	0.08	23.45	24.14	22.97	0.15	1.42	1.28	1.29	1.28
442.50	5.34	5.39	5.44	0.10	22.89	23.66	22.37	0.13	1.45	1.30	1.32	1.31
532.50	5.44	5.53	5.59	0.15	22.98	23.90	22.36	0.11	1.44	1.33	1.35	1.33
600.00	5.45	5.56	5.64	0.19	23.59	24.79	22.87	0.16	1.39	1.34	1.37	1.35
660.00	5.41	5.54	5.63	0.22	24.60	26.31	23.75	0.20	1.32	1.33	1.38	1.36
720.00	5.37	5.53	5.64	0.27	25.76	28.49	24.81	0.37	1.21	1.32	1.38	1.35
750.00	5.38	5.55	5.67	0.29	26.13	29.46	25.26	0.46	1.15	1.31	1.37	1.34

ZFSC-3-1W-S+
TOTAL LOSS

1. Total Loss = Insertion Loss + 4.8dB splitter loss.

ZFSC-3-1W-S+
ISOLATION



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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