

Coaxial Power Splitter/Combiner

ZFSC-48-1

48 Way-0° 50Ω 10 to 300 MHz

Maximum Ratings

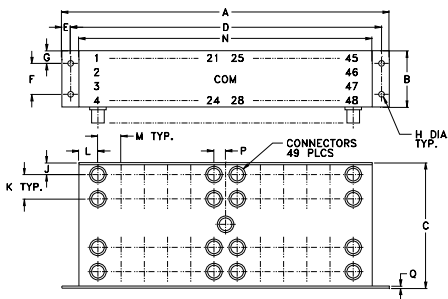
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.87W max.

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

Coaxial Connections

SUM PORT	S (COM)
PORT 1,2,3,4.....,48	1,2,3,4.....,48

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
9.31	1.60	3.57	8.84	.25	.88	.36	.160
236.47	40.64	90.68	224.54	6.35	22.35	9.14	4.06

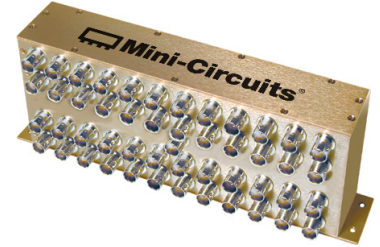
J	K	L	M	N	P	Q	wt
.34	.69	.54	.66	8.34	.33	.06	grams
8.64	17.53	13.72	16.76	211.84	8.38	1.52	1090.0

Features

- good isolation, 28 dB typ.
- rugged shielded case

Applications

- HF/VHF
- instrumentation
- test set-ups



BNC version shown
CASE STYLE: HH68

Connectors	Model
BNC	ZFSC-48-1
SMA	ZFSC-48-1-S

Electrical Specifications

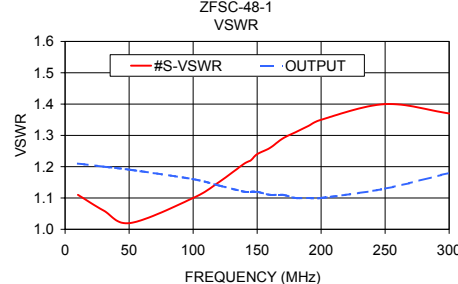
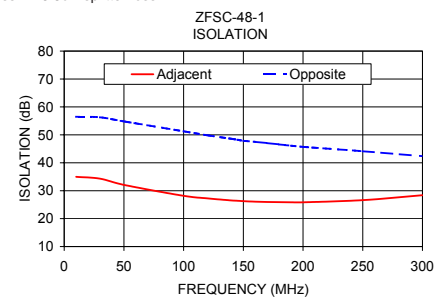
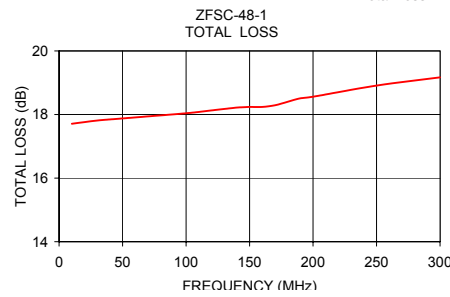
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 16.8 dB						AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.
10-300	30	25	28	20	23	20	1.2	2.0	2.1	2.5	2.8	4.0	0.8	0.9	1.2

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)	Amplitude Unbalance (dB)	Isolation (dB)		VSWR S	VSWR OUTPUT
			Adjacent	Opposite		
			S-1			
10.00	17.71	0.27	34.97	56.49	1.11	1.21
30.00	17.81	0.25	34.32	56.28	1.06	1.20
51.00	17.88	0.31	31.99	54.74	1.02	1.19
100.00	18.04	0.47	28.18	51.27	1.10	1.16
120.00	18.13	0.54	27.25	49.83	1.15	1.14
140.00	18.22	0.57	26.52	48.59	1.21	1.12
145.00	18.23	0.58	26.40	48.27	1.22	1.12
150.00	18.24	0.58	26.28	47.89	1.24	1.12
160.00	18.24	0.57	26.08	47.49	1.26	1.11
170.00	18.29	0.56	25.95	47.06	1.29	1.11
180.00	18.40	0.53	25.90	46.59	1.31	1.10
190.00	18.51	0.50	25.86	46.13	1.33	1.10
200.00	18.56	0.47	25.86	45.71	1.35	1.10
250.00	18.91	0.50	26.62	44.13	1.40	1.13
300.00	19.17	0.82	28.40	42.37	1.37	1.18

1. Total Loss = Insertion Loss + 16.8dB splitter loss.



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.
- 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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