

Coaxial

Power Splitter/Combiner

2 Way-180° 50Ω 1 to 500 MHz

ZFSCJ-2-1+
ZFSCJ-2-1



BNC version shown
CASE STYLE: K18

Connectors	Model
BNC	ZFSCJ-2-1
SMA	ZFSCJ-2-1-S(+)
N-TYPE	ZFSCJ-2-1-N
	BRACKET (OPTION "B")

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

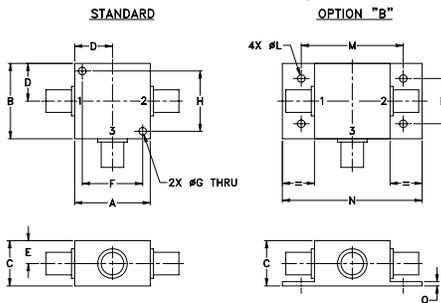
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

Coaxial Connections

SUM PORT(S)	3
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.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	70.0

For bracket version, Option B dimension "C" changes from 0.75 to 0.94 inch when connectors are Type N.

Features

- wideband, 1 to 500 MHz
- high isolation, 30 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- rugged shielded case

Applications

- VHF/UHF
- signal processing

Electrical Specifications

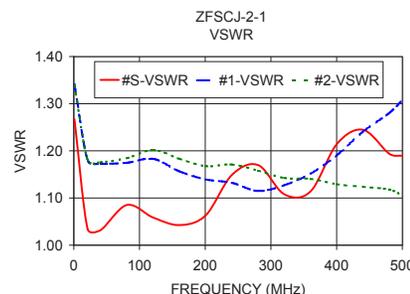
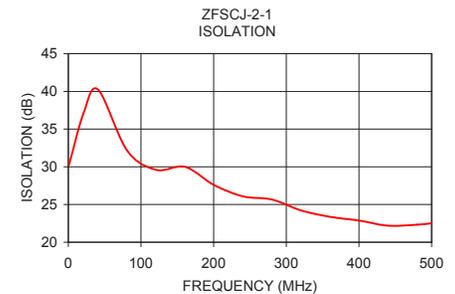
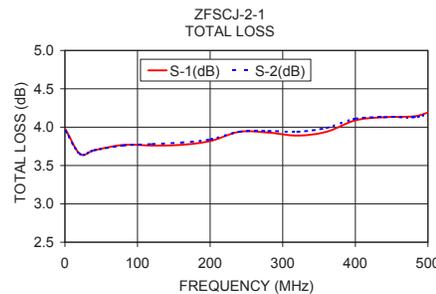
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L - f_U	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
1-500	30	20	33	25	30	18	1.0	1.5	1.0	1.5	1.0	1.5	2	4	7	0.5	0.2	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

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	3.97	3.95	0.02	30.26	179.94	1.27	1.34	1.34
20.96	3.65	3.65	0.00	37.10	180.23	1.03	1.18	1.18
40.92	3.70	3.70	0.00	40.24	180.39	1.03	1.17	1.18
80.84	3.77	3.76	0.00	32.16	181.09	1.09	1.17	1.18
120.76	3.76	3.78	0.02	29.60	181.43	1.06	1.18	1.20
160.68	3.77	3.80	0.03	29.99	181.76	1.04	1.16	1.18
200.60	3.82	3.84	0.02	27.58	181.71	1.06	1.14	1.17
240.52	3.94	3.94	0.01	26.07	181.79	1.15	1.13	1.17
280.44	3.93	3.95	0.02	25.65	181.93	1.17	1.11	1.16
320.36	3.89	3.94	0.05	24.22	181.89	1.11	1.13	1.14
360.28	3.94	3.99	0.05	23.37	181.49	1.11	1.15	1.14
400.20	4.09	4.11	0.03	22.87	180.85	1.21	1.19	1.13
440.12	4.13	4.13	0.00	22.19	180.17	1.24	1.24	1.12
480.04	4.14	4.13	0.01	22.33	179.57	1.19	1.28	1.12
500.00	4.19	4.17	0.03	22.51	179.34	1.19	1.31	1.11

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