Coaxial

Power Splitter/Combiner

2 Way-180° 50Ω 1 to 500 MHz

ZFSCJ-2-1+



Generic photo used for illustration purposes only

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

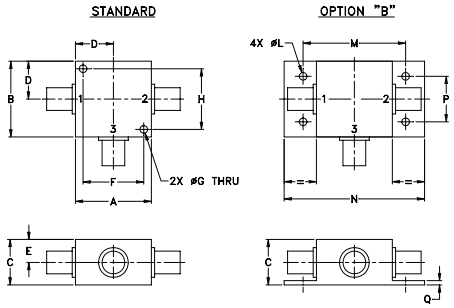
Features

- 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

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.

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

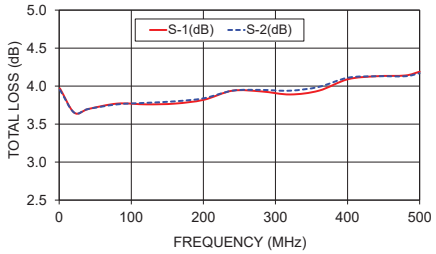
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

Typical Performance Data

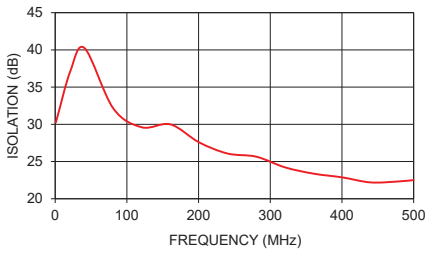
Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	3.97	3.95	0.02	30.26	179.94	1.27	1.34	1.34
20.96	3.65	3.65	0.00	37.10	180.23	1.03	1.18	1.18
40.92	3.70	3.70	0.00	40.24	180.39	1.03	1.17	1.18
80.84	3.77	3.76	0.00	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.

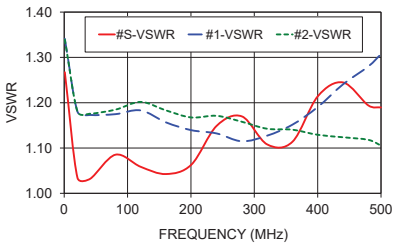
ZFSCJ-2-1-S+
TOTAL LOSS



ZFSCJ-2-1-S+
ISOLATION



ZFSCJ-2-1-S+
VSWR



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.
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