

Coaxial

Power Splitter/Combiner

2 Way-0° 50Ω 5 to 500 MHz

Maximum Ratings

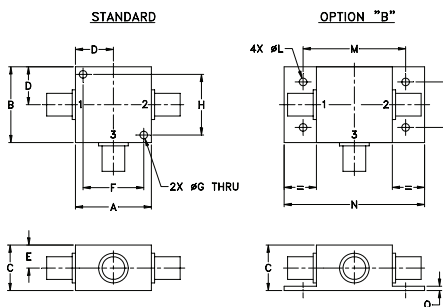
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

Coaxial Connections

SUM PORT	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 option B with N-type connectors, dimension "C" increases to 0.94 inches.

Features

- wideband, 5 to 500 MHz
- low insertion loss, 0.3 dB typ.
- excellent isolation, 28 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- good VSWR, 1.2:1 typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation
- communication systems

ZFSC-2-1+



Generic photo used for illustration purposes only
CASE STYLE: K18

Connectors	Model
BNC	ZFSC-2-1+
SMA	ZFSC-2-1-S+
N-TYPE	ZFSC-2-1-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 3.0 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.	Max.	Max.	Max.	Max.	Max.	Max.
5-500	30	25	28	20	25	20	0.2	0.5	0.3	0.6	0.6	0.8	2	4	4	0.15	0.15	0.30

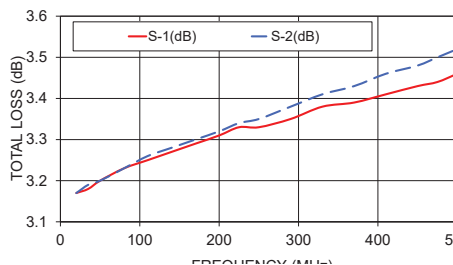
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

Typical Performance Data

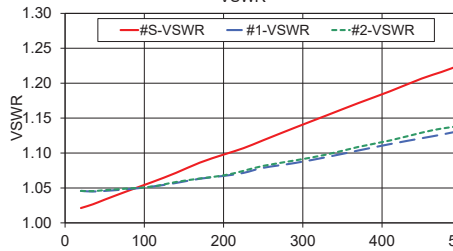
Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
20	3.17	3.17	0.00	38.54	0.08	1.02	1.05	1.05
35	3.18	3.19	0.00	37.55	0.05	1.03	1.04	1.05
80	3.23	3.23	0.00	35.20	0.01	1.05	1.05	1.05
140	3.27	3.28	0.01	32.86	0.01	1.07	1.06	1.06
170	3.29	3.30	0.01	31.68	0.03	1.09	1.06	1.06
200	3.31	3.32	0.01	30.89	0.05	1.10	1.07	1.07
225	3.33	3.34	0.02	30.37	0.09	1.11	1.07	1.07
250	3.33	3.35	0.02	29.60	0.08	1.12	1.08	1.08
290	3.35	3.38	0.03	28.75	0.13	1.14	1.09	1.09
330	3.38	3.41	0.03	28.01	0.17	1.15	1.09	1.10
370	3.39	3.43	0.04	27.35	0.21	1.17	1.10	1.11
410	3.41	3.46	0.05	26.80	0.25	1.19	1.11	1.12
450	3.43	3.48	0.05	26.31	0.30	1.21	1.12	1.13
475	3.44	3.50	0.06	26.09	0.32	1.22	1.13	1.14
500	3.46	3.52	0.06	25.83	0.34	1.23	1.13	1.14

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

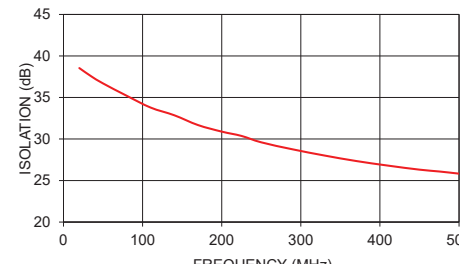
ZFSC-2-1-S+ TOTAL LOSS



ZFSC-2-1-S+ VSWR



ZFSC-2-1-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.
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