Coaxial

Power Splitter/Combiner

ZFSC-3-1W+

3 Way-0° 50Ω 2 to 750 MHz



Generic photo used for illustration purposes only

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

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

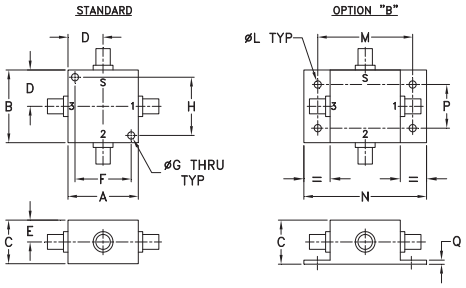
Features

- 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

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.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	75.0

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

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	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.
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

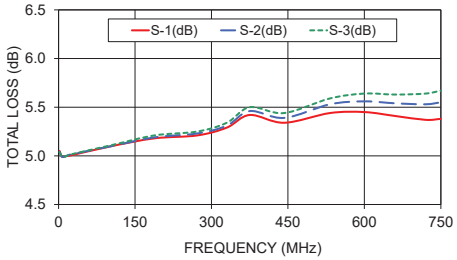
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

Typical Performance Data

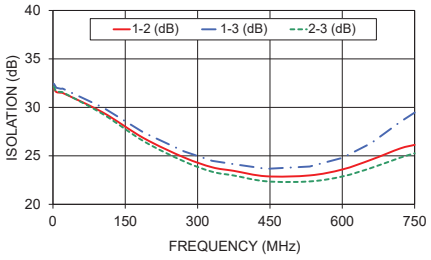
Freq. (MHz)	Total Loss[1] (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
2.00	5.05	5.04	5.04	0.00	31.97	32.43	32.13	0.05	1.17	1.15	1.15	1.15
6.80	4.99	4.99	4.99	0.00	31.59	32.02	31.67	0.02	1.14	1.14	1.15	1.14
16.40	5.00	5.00	5.00	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

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

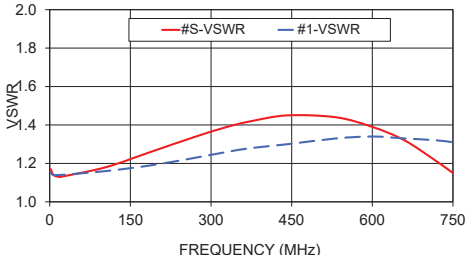
ZFSC-3-1W-S+
TOTAL LOSS



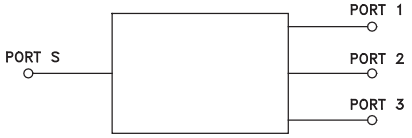
ZFSC-3-1W-S+
ISOLATION



ZFSC-3-1W-S+
VSWR



electrical schematic



Notes

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