

Power Splitter/Combiner

ZFSC-6-110

6 Way-0° 50Ω 1 to 500 MHz

Maximum Ratings

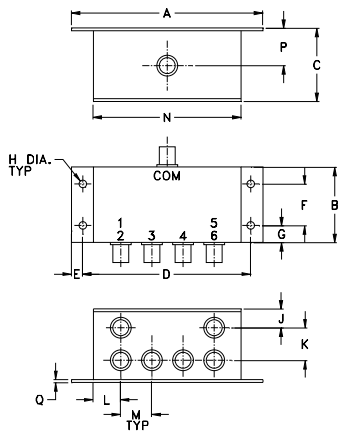
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.5W max.

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

Coaxial Connections

SUM PORT	S
PORT 1,2,3,4,5,6	1,2,3,4,5,6

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
4.06	1.60	1.57	3.56	.24	.88	.36	.160
103.12	40.64	39.88	90.42	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt
.43	.69	.58	.66	3.13	.8	.125	grams
10.92	17.53	14.73	16.76	79.50	20.32	3.18	190.0

Features

- wideband, 1 to 500 MHz
- low insertion loss, 0.6 dB typ.
- good isolation, 26 dB typ.
- good amplitude unbalance, 0.3 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation
- receivers and transmitters

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 7.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			VSWR (:1)			
	L	M	U	L	M	U	L	M	U	L	M	U	L	M	U	L	M	U	S	OUT		
f _L -f _U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Typ.	Max.	Typ.	Max.
1-500	35	25	26	20	25	20	0.5	0.8	0.6	1.1	1.0	1.7	2	6	12	0.3	0.3	0.8	—	—	—	—

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]

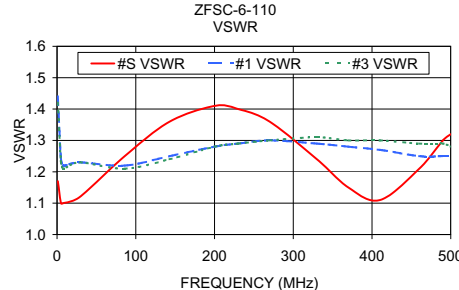
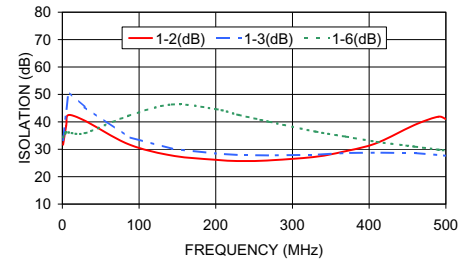
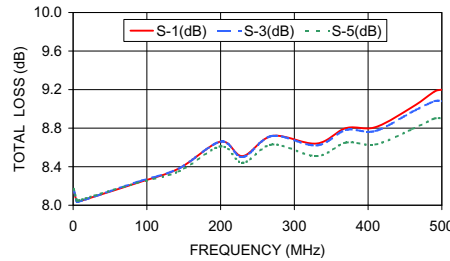
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3	1-6				
1.00	8.15	8.16	8.17	0.09	31.66	33.32	34.39	0.14	1.17	1.44	1.42
5.00	8.04	8.04	8.05	0.05	38.59	43.62	36.18	0.06	1.10	1.24	1.23
8.00	8.04	8.04	8.05	0.04	42.48	50.99	36.16	0.13	1.10	1.22	1.21
29.00	8.09	8.09	8.10	0.03	40.47	45.41	35.86	0.46	1.12	1.23	1.23
86.00	8.23	8.24	8.23	0.02	31.86	34.47	42.20	1.19	1.25	1.22	1.21
143.00	8.38	8.38	8.35	0.03	27.71	30.17	46.32	1.82	1.36	1.25	1.24
200.00	8.66	8.66	8.61	0.05	26.16	28.45	44.64	2.49	1.41	1.28	1.28
230.00	8.51	8.50	8.44	0.08	25.72	27.87	42.52	2.74	1.40	1.29	1.29
270.00	8.72	8.72	8.63	0.09	25.94	27.77	40.02	3.18	1.36	1.30	1.30
330.00	8.64	8.62	8.51	0.13	27.24	27.99	36.44	3.53	1.24	1.29	1.31
370.00	8.80	8.78	8.65	0.15	29.33	28.64	34.61	4.09	1.15	1.28	1.30
410.00	8.81	8.77	8.63	0.18	32.29	28.75	32.70	4.20	1.11	1.27	1.30
460.00	9.02	8.97	8.79	0.23	38.99	28.62	30.93	4.51	1.21	1.25	1.29
490.00	9.18	9.08	8.90	0.27	41.87	27.89	29.83	4.49	1.30	1.25	1.29
500.00	9.20	9.08	8.90	0.29	41.00	27.62	29.50	4.38	1.32	1.25	1.28

ZFSC-6-110 TOTAL LOSS

1. Total Loss = Insertion Loss + 7.8dB splitter loss.

ZFSC-6-110 ISOLATION



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.
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