

Coaxial Power Splitter/Combiner

3 Way-0° 50Ω 1 to 200 MHz

ZSC-3-1+
ZSC-3-1



Generic photo used for illustration purposes only

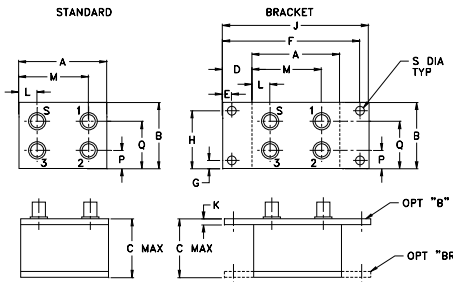
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.375W 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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
2.25	1.38	1.24	.50	.150	3.100	.138	1.238	
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45	
J	K	L	M	N	P	Q	S	wt
3.25	.10	.78	1.47	--	.38	1.00	.150	grams
82.55	2.54	19.81	37.34	--	9.65	25.40	3.81	110.0

Features

- low insertion loss, 0.4 dB typ.
- high isolation, 40 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.5:1 typ.
- rugged shielded case

Applications

- VHF
- instrumentation
- communication system

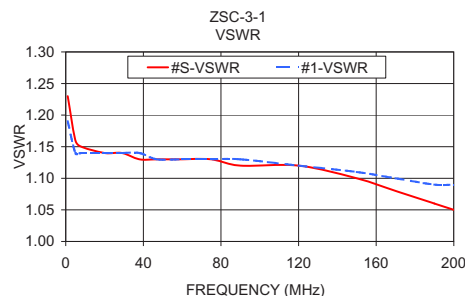
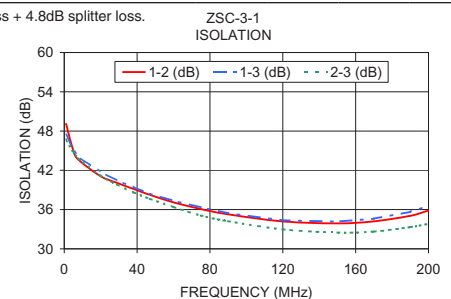
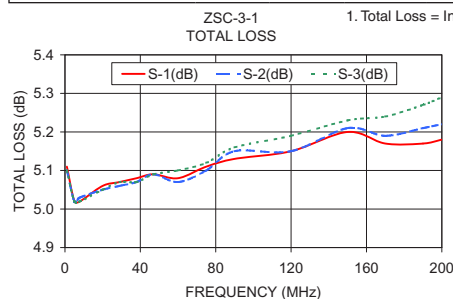
Splitter Electrical Specifications

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.
1-200	45	30	40	25	40	25	0.3	0.5	0.4	0.7	0.6	1.0	1	2	4	0.15	0.2	0.3

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					
1.00	5.11	5.10	5.10	0.00	49.11	47.46	46.70	0.05	1.23	1.19	1.19	1.18
5.00	5.02	5.02	5.02	0.00	44.98	45.11	44.74	0.04	1.16	1.14	1.14	1.14
8.00	5.02	5.03	5.02	0.01	43.57	44.02	43.72	0.09	1.15	1.14	1.14	1.14
20.00	5.06	5.05	5.05	0.01	41.08	41.74	41.14	0.19	1.14	1.14	1.13	1.13
29.00	5.07	5.06	5.07	0.01	40.08	40.44	39.84	0.21	1.14	1.14	1.13	1.13
38.00	5.08	5.07	5.07	0.01	39.15	39.44	38.61	0.30	1.13	1.14	1.13	1.13
47.00	5.09	5.09	5.09	0.00	38.26	38.41	37.64	0.42	1.13	1.13	1.13	1.13
60.00	5.08	5.07	5.10	0.03	37.10	37.35	36.39	0.56	1.13	1.13	1.13	1.13
75.00	5.11	5.10	5.12	0.01	36.09	36.35	35.09	0.63	1.13	1.13	1.13	1.13
90.00	5.13	5.15	5.16	0.03	35.28	35.44	34.23	0.76	1.12	1.13	1.13	1.12
120.00	5.15	5.15	5.19	0.04	34.19	34.35	32.97	1.13	1.12	1.12	1.12	1.12
150.00	5.20	5.21	5.23	0.03	33.89	34.16	32.49	1.26	1.10	1.11	1.12	1.11
170.00	5.17	5.19	5.24	0.07	34.61	34.20	32.64	1.46	1.08	1.10	1.11	1.10
190.00	5.17	5.21	5.27	0.09	35.05	35.66	33.32	1.55	1.06	1.09	1.10	1.10
200.00	5.18	5.22	5.29	0.10	35.86	36.56	33.82	1.70	1.05	1.09	1.10	1.10



electrical schematic



Notes

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