

Coaxial

# Power Splitter/Combiner

## ZMSCJ-2-1

2 Way-180° 50Ω 1 to 200 MHz



CASE STYLE: M21

Connectors Model  
**SMA ZMSCJ-2-1**  
**BRACKET (OPTION "B")**  
**BRACKET (OPTION "BR")**

### 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	2
PORT 1	1
PORT 2	3

### Features

- low insertion loss, 0.6 dB typ.
- high isolation, 35 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- rugged shielded case

### Applications

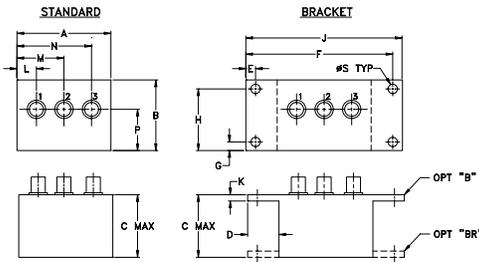
- VHF
- signal processing
- radio communications

### 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
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f <sub>L</sub> -f <sub>U</sub>																		
1-200	35	30	35	25	30	23	0.75	1.0	0.6	0.8	0.75	1.2	2	2.5	4	0.3	0.15	0.3

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

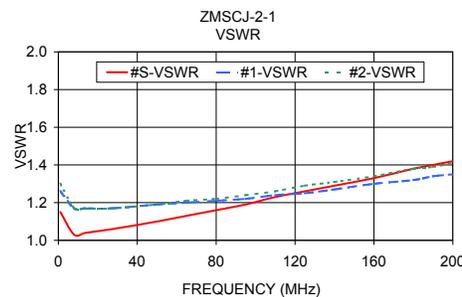
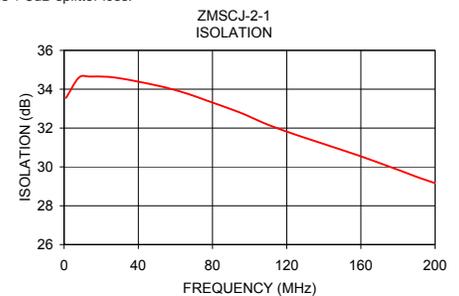
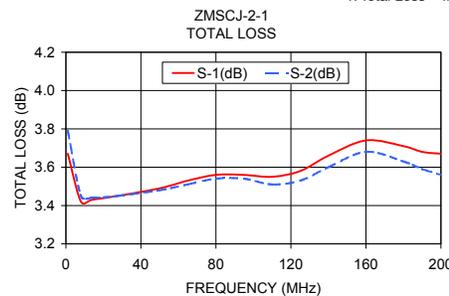
  

J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

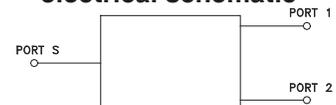
### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	3.67	3.79	0.12	33.55	181.00	1.15	1.26	1.30
8.00	3.42	3.45	0.02	34.60	179.58	1.03	1.17	1.17
14.00	3.43	3.44	0.01	34.65	179.71	1.04	1.17	1.17
27.50	3.45	3.45	0.00	34.60	179.78	1.06	1.17	1.17
50.00	3.49	3.48	0.01	34.19	179.76	1.10	1.19	1.19
65.00	3.53	3.51	0.02	33.81	179.74	1.13	1.20	1.21
80.00	3.56	3.54	0.02	33.31	179.73	1.16	1.21	1.22
95.00	3.56	3.54	0.02	32.79	179.70	1.19	1.22	1.24
110.00	3.55	3.51	0.03	32.17	179.62	1.23	1.24	1.26
125.00	3.58	3.53	0.05	31.65	179.59	1.26	1.25	1.29
140.00	3.66	3.60	0.06	31.18	179.64	1.29	1.27	1.31
160.00	3.74	3.68	0.06	30.54	179.62	1.33	1.30	1.34
180.00	3.71	3.63	0.08	29.85	179.54	1.38	1.32	1.38
190.00	3.68	3.59	0.09	29.49	179.50	1.40	1.34	1.39
200.00	3.67	3.56	0.11	29.16	179.46	1.42	1.35	1.41

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



### electrical schematic



### Notes

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