Coaxial

Power Splitter/Combiner

ZMSCJ-2-2

2 Way-180° 50Ω 0.01 to 20 MHz

CASE STYLE: M21

Connectors	Model	Price	Qty.
SMA	ZMSCJ-2-2	$67.95	(1-9)
BRACKET (OPTION"B")		$5.00	(1+)
BRACKET (OPTION"BR")		$1.50	(1+)

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.

Coaxial Connections

SUMPORT	2
PORT 1	1
PORT 2	3

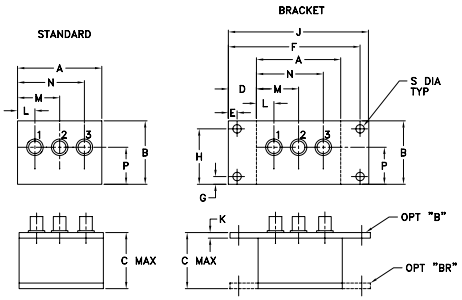
Features

- low insertion loss, 0.2 dB typ.
- high isolation, 30 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- good VSWR, 1.15:1 typ.
- rugged shielded case

Applications

- HF
- radio communication
- instrumentation
- signal processing

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

Splitter Electrical Specifications

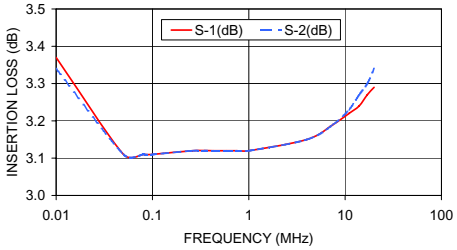
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L-f_U	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
0.01-20	35	25	30	25	25	18	0.3	0.8	0.2	0.5	0.3	0.6	1*	2	2.5	0.1	0.1	0.2

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]
At low range frequency band (f_L to 10 f_L), linearly derate maximum input power by 13 dB.
* Phase unbalance is 3 degrees max from f_L to 3f_L

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
0.01	3.37	3.34	0.03	31.46	180.24	1.51	1.44	1.43
0.05	3.11	3.11	0.00	36.25	180.10	1.15	1.11	1.11
0.08	3.11	3.11	0.00	36.51	180.07	1.13	1.09	1.09
0.10	3.11	3.11	0.00	36.54	180.06	1.12	1.09	1.09
0.26	3.12	3.12	0.00	36.58	179.98	1.12	1.08	1.08
0.43	3.12	3.12	0.00	36.61	179.97	1.12	1.08	1.08
0.59	3.12	3.12	0.00	36.64	179.97	1.12	1.08	1.08
0.75	3.12	3.12	0.00	36.69	179.95	1.12	1.08	1.08
1.00	3.12	3.12	0.00	36.74	179.94	1.12	1.08	1.08
4.00	3.15	3.15	0.00	37.33	179.85	1.13	1.07	1.07
7.50	3.19	3.19	0.01	37.43	179.72	1.14	1.07	1.06
11.00	3.22	3.23	0.01	36.35	179.59	1.14	1.07	1.06
14.00	3.24	3.27	0.02	34.52	179.49	1.15	1.07	1.05
17.00	3.27	3.30	0.04	32.32	179.38	1.15	1.08	1.05
20.00	3.29	3.34	0.05	30.10	179.29	1.16	1.09	1.05

ZMSCJ-2-2
INSERTION LOSS



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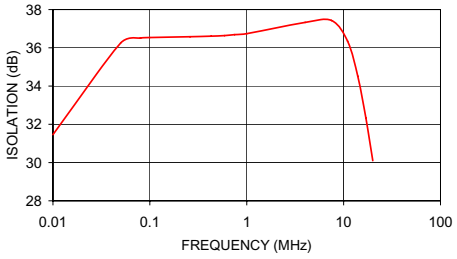
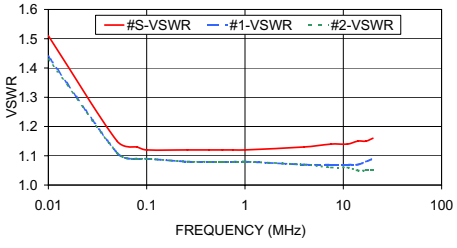
ISOLATION



ZMSCJ-2-1
VSWR



electrical schematic