

# Coaxial Power Splitter/Combiner

## ZMSC-2-1W+

2 Way-0° 50Ω 1 to 650 MHz

### Maximum Ratings

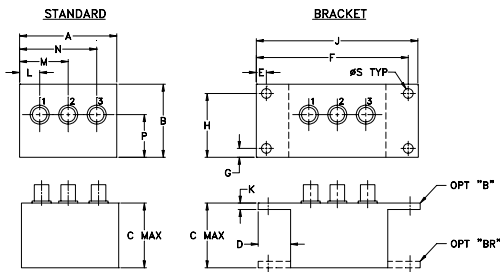
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

### Coaxial Connections

SUM PORT	2
PORT 1	1
PORT 2	3

### Outline Drawing



### Outline Dimensions (inch/mm)

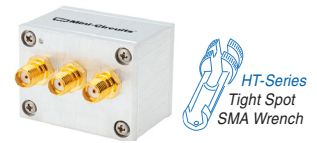
A	B	C	D	E	F	G	H	J	K	L	M	N	P	S	wt
1.50	1.13	1.00	.50	.155	2.345	.138	.987	2.50	.10	.31	.75	1.19	.66	.150	grams
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07	63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

### Features

- wideband, 1 to 650 MHz
- excellent isolation, 35 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1.0 deg. typ.
- rugged shielded case

### Applications

- VHF/UHF
- instrumentation
- communications systems



Generic photo used for illustration purposes only

CASE STYLE: M21  
Connectors Model  
**SMA** ZMSC-2-1W+  
**BRACKET (OPTION "B")**  
**BRACKET (OPTION "BR")**

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

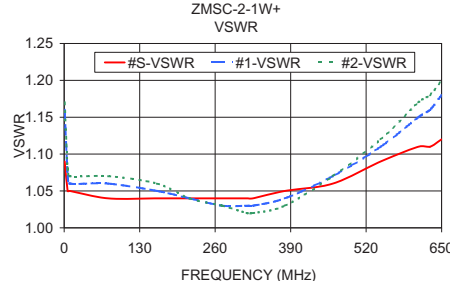
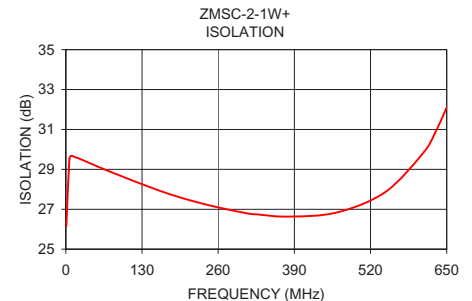
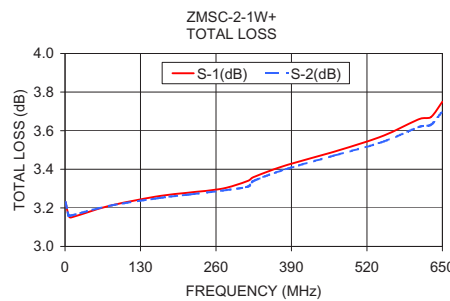
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB)** ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
$f_L$ - $f_U$	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
1-650	25	20	35	20	25	20	0.3	0.5	0.5	0.8	0.7	1.0	2	3	4	0.15	0.20	0.30

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 <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	3.23	3.23	0.00	26.15	0.03	1.09	1.16	1.17
6.00	3.16	3.16	0.00	29.51	0.06	1.05	1.07	1.08
10.00	3.15	3.16	0.00	29.68	0.04	1.05	1.06	1.07
76.00	3.21	3.21	0.00	28.88	0.15	1.04	1.06	1.07
160.00	3.26	3.25	0.01	27.93	0.34	1.04	1.05	1.06
216.00	3.28	3.27	0.01	27.42	0.39	1.04	1.04	1.04
272.00	3.30	3.29	0.01	27.02	0.54	1.04	1.03	1.03
315.00	3.34	3.31	0.03	26.77	0.55	1.04	1.03	1.02
325.00	3.36	3.34	0.02	26.75	0.60	1.04	1.03	1.02
380.00	3.42	3.40	0.02	26.63	0.65	1.05	1.04	1.03
462.50	3.49	3.47	0.02	26.84	0.71	1.06	1.07	1.07
545.00	3.57	3.54	0.03	27.86	0.83	1.09	1.11	1.12
610.00	3.66	3.62	0.04	29.83	0.82	1.11	1.15	1.17
630.00	3.67	3.63	0.04	30.82	0.84	1.11	1.16	1.18
650.00	3.75	3.70	0.04	32.10	0.87	1.12	1.18	1.20

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



### 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

