

Coaxial

# Power Splitter/Combiner

## ZX10-4A-19+

4 Way-0° 50Ω

1425 to 1900 MHz

### Maximum Ratings

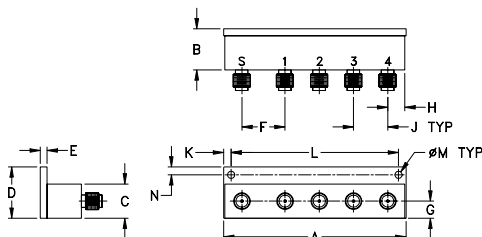
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	2.5W max.
Internal Dissipation	0.125W max.

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
PORT 4	4

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
2.67	.60	.50	.75	.10	.63	.25	.25
67.82	15.24	12.70	19.05	2.54	16.00	6.35	6.35
J	K	L	M	N	wt. grams		
.50	.11	2.445	.106	.12	65.0		
12.70	2.79	62.10	2.69	3.05			

### Features

- low insertion loss, 0.75 dB typ.
- high isolation, 20 dB typ.
- rigid unibody construction
- convenient for panel mount applications
- low cost
- very small size
- protected by US patent 6,790,049

### Applications

- antenna arrays
- signal distribution
- test bench

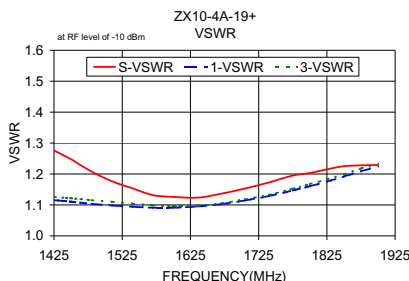
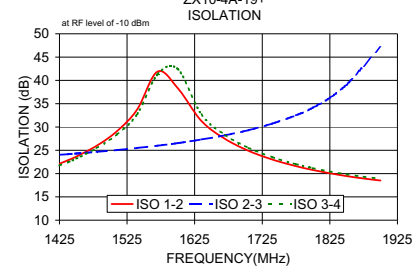
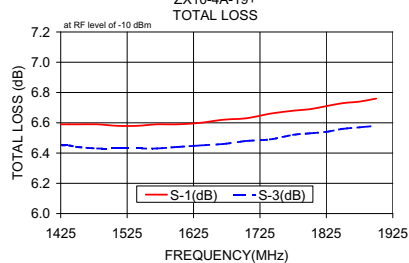
### Electrical Specifications (T<sub>AMB</sub>=25°C)

FREQ. RANGE (MHz)	Total Loss <sup>1</sup> (dB)		INSERTION LOSS (dB) ABOVE 6 dB		PHASE UNBALANCE (Deg.)	AMPLITUDE UNBALANCE (dB)	INPUT VSWR (:1)	OUTPUT VSWR (:1)
	Typ.	Min.	Typ.	Max.	Max.	Max.	Typ.	Typ.
f <sub>c</sub> -f <sub>u</sub>								
1425-1900	20	16	0.75	1.1	5.0	0.7	1.2	1.2
1450-1775	24	20	0.75	1.0	4.0	0.7	1.2	1.2

### Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
1425.00	6.59	6.67	6.45	6.37	0.30	22.11	24.04	21.73	1.45	1.28	1.12	1.14	1.13	1.13
1437.50	6.59	6.67	6.45	6.36	0.31	22.85	24.17	22.44	1.45	1.26	1.11	1.14	1.12	1.12
1450.00	6.59	6.67	6.44	6.35	0.32	23.66	24.30	23.22	1.45	1.25	1.11	1.15	1.12	1.12
1480.00	6.59	6.68	6.43	6.33	0.34	25.97	24.67	25.45	1.45	1.21	1.10	1.16	1.12	1.12
1510.00	6.58	6.68	6.43	6.32	0.36	29.08	25.05	28.39	1.44	1.18	1.10	1.12	1.11	1.11
1540.00	6.58	6.69	6.43	6.31	0.37	33.77	25.51	32.77	1.44	1.15	1.09	1.13	1.10	1.10
1570.00	6.59	6.70	6.43	6.31	0.39	41.87	25.99	41.26	1.44	1.13	1.09	1.14	1.10	1.10
1600.00	6.59	6.71	6.44	6.30	0.40	38.34	26.54	42.45	1.43	1.13	1.09	1.11	1.10	1.10
1635.00	6.60	6.72	6.45	6.30	0.42	31.30	27.31	32.71	1.49	1.12	1.09	1.13	1.10	1.10
1670.00	6.62	6.74	6.46	6.30	0.44	27.44	28.23	28.28	1.64	1.14	1.10	1.13	1.11	1.11
1705.00	6.63	6.76	6.48	6.31	0.45	24.88	29.33	25.50	1.78	1.15	1.11	1.12	1.12	1.12
1740.00	6.66	6.77	6.49	6.31	0.47	23.02	30.73	23.51	1.97	1.17	1.13	1.16	1.13	1.13
1775.00	6.68	6.80	6.52	6.32	0.48	21.59	32.51	22.03	2.10	1.20	1.15	1.14	1.15	1.15
1800.00	6.69	6.81	6.53	6.32	0.49	20.77	34.15	21.18	2.21	1.20	1.16	1.15	1.17	1.17
1825.00	6.71	6.82	6.54	6.32	0.50	20.07	36.26	20.46	2.35	1.21	1.18	1.19	1.18	1.18
1850.00	6.73	6.84	6.56	6.33	0.51	19.47	39.11	19.85	2.47	1.23	1.19	1.19	1.20	1.20
1875.00	6.74	6.85	6.57	6.33	0.52	18.95	43.10	19.34	2.55	1.23	1.21	1.19	1.22	1.22
1900.00	6.76	6.86	6.58	6.33	0.53	18.51	47.13	18.91	2.69	1.23	1.23	1.22	1.23	1.23

1. Total Loss = Insertion Loss + 6dB splitter loss.



### electrical schematic



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

For detailed performance specs & shipping online see web site

REV. B  
M127604  
ZX10-4A-19  
ED-11601/3  
AD/LC/CP/AM  
120130