

DC Pass

NON-CATALOG

High Power Combiner

ZB4CS-960-12W

4 Way-0° 50Ω 820 to 960 MHz

Maximum Ratings

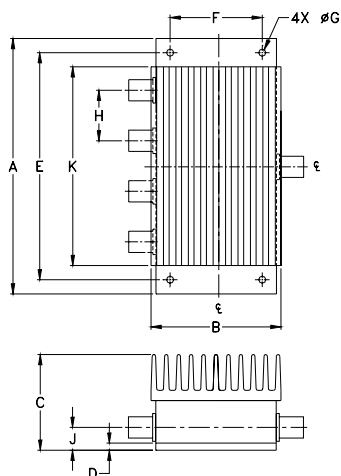
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
DC Current	1.0 A (250mA for each port)

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)

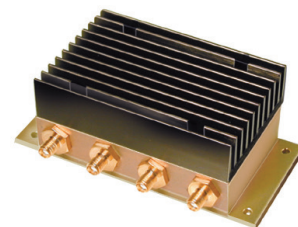
A	B	C	D	E	F
4.50	2.25	1.69	.125	4.000	1.625
114.30	57.15	42.93	3.18	101.60	41.28
G	H	J	K		wt
.144	.890	.44	3.50		grams
3.66	22.61	11.18	88.90		500

Features

- high power, up to 12W input power
- low insertion loss, 0.3 dB typ.
- high isolation, 28 dB typ.
- excellent VSWR, 1.18 typ.

Applications

- cellular
- UHF



CASE STYLE: AW256

Connectors Model
SMA ZB4CS-960-12W-S

High Power Combiner Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
f_L - f_U	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
820-960	28	17	0.3	0.8	2.0	6.0	0.2	0.6	12	12

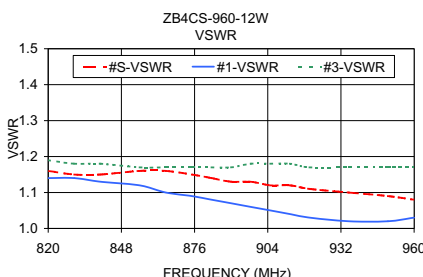
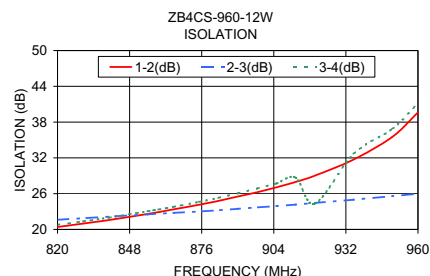
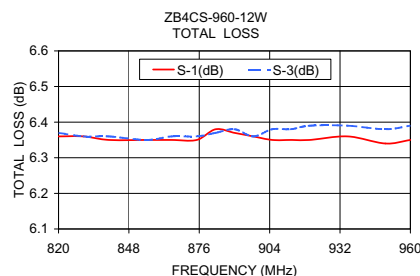
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C

2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

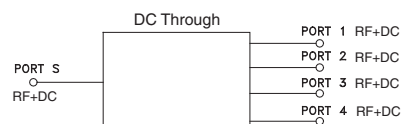
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
820.00	6.36	6.43	6.37	6.29	0.14	20.41	21.61	20.77	1.48	1.16	1.14	1.20	1.19	1.13
830.00	6.36	6.44	6.36	6.28	0.16	20.98	21.88	21.36	1.52	1.15	1.14	1.20	1.18	1.13
840.00	6.35	6.43	6.36	6.27	0.16	21.58	22.14	21.98	1.57	1.15	1.13	1.20	1.18	1.12
855.00	6.35	6.43	6.35	6.27	0.16	22.60	22.52	23.05	1.47	1.16	1.12	1.19	1.17	1.12
865.00	6.35	6.44	6.36	6.26	0.18	23.36	22.78	23.79	1.59	1.16	1.10	1.18	1.17	1.11
875.00	6.35	6.45	6.36	6.30	0.16	24.14	23.00	24.62	1.55	1.15	1.09	1.17	1.17	1.11
882.50	6.38	6.45	6.37	6.29	0.16	24.78	23.21	25.29	1.56	1.14	1.08	1.17	1.17	1.11
890.00	6.37	6.46	6.38	6.29	0.17	25.51	23.46	26.05	1.53	1.13	1.07	1.16	1.17	1.11
897.50	6.36	6.44	6.36	6.29	0.15	26.23	23.69	26.85	1.43	1.13	1.06	1.16	1.18	1.11
905.00	6.35	6.45	6.38	6.28	0.17	27.05	23.92	27.71	1.40	1.12	1.05	1.16	1.18	1.11
912.50	6.35	6.45	6.38	6.27	0.17	27.96	24.17	28.69	1.50	1.12	1.04	1.16	1.18	1.12
920.00	6.35	6.46	6.39	6.28	0.18	29.03	24.44	24.32	1.51	1.11	1.03	1.16	1.17	1.12
935.00	6.36	6.45	6.39	6.27	0.17	31.72	24.99	32.67	1.40	1.10	1.02	1.17	1.17	1.12
950.00	6.34	6.45	6.38	6.27	0.18	35.51	25.58	36.85	1.45	1.09	1.02	1.17	1.17	1.12
960.00	6.35	6.45	6.39	6.27	0.18	39.62	26.00	41.10	1.40	1.08	1.03	1.17	1.17	1.12

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



electrical schematic



Notes

- A. 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.
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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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