

DC Pass

High Power Combiner

ZB5PD-894-50W

5 Way-0° 50Ω 800 to 894 MHz

Maximum Ratings

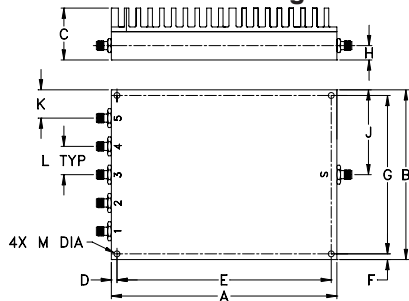
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
DC Current	500 A (100mA for each port)

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
PORT 5	5

Outline Drawing



Outline Dimensions (inch/mm)

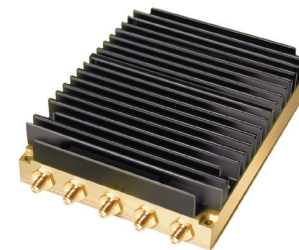
A	B	C	D	E	F	G	
6.00	4.50	1.38	.15	5.700	.15	4.200	
152.40	114.30	35.05	3.81	144.78	3.81	106.68	
H	J	K	L	M			wt
.38	2.25	.75	.75	.156			grams
9.65	57.15	19.05	19.05	3.96			960

Features

- 50 watts total as a combiner
- low insertion loss, 0.4 dB typ.
- high isolation, 32 dB typ.
- excellent amplitude unbalance, 0.15 dB typ.

Applications

- cellular
- UHF



CASE STYLE: BV278

Connectors	Model	Price	Qty.
SMA	ZB5PD-894-50W-S	Contact Sales Dept.	

High Power Combiner Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 7.0 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.
800-894	32 20	0.4 0.8	— —	0.15 0.45	50 50

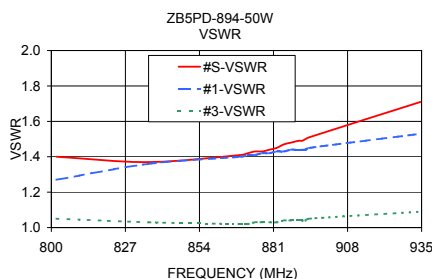
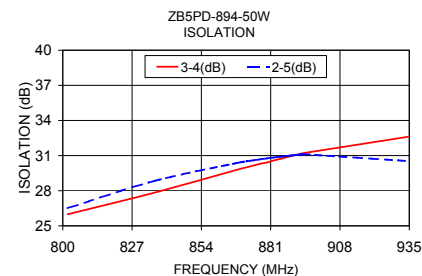
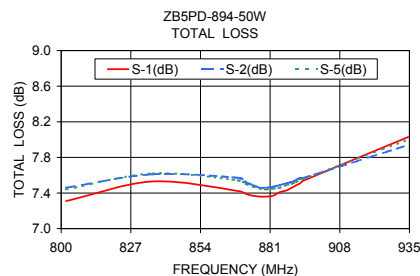
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C

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

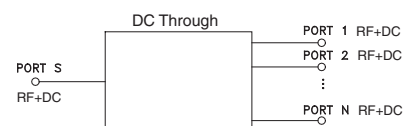
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)					Amp. Unbal. (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 5
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	3-4	2-5			
801.90	7.31	7.46	7.52	7.58	7.44	0.27	26.37	35.78	25.99	26.51	1.40	1.27	1.05
835.45	7.53	7.61	7.50	7.58	7.62	0.11	28.19	43.24	27.82	28.82	1.37	1.36	1.03
869.00	7.42	7.57	7.43	7.51	7.54	0.15	29.50	39.34	29.86	30.42	1.41	1.40	1.02
871.63	7.39	7.52	7.39	7.48	7.50	0.14	29.57	38.72	30.00	30.51	1.42	1.41	1.02
874.26	7.37	7.49	7.36	7.44	7.47	0.13	29.66	38.19	30.15	30.59	1.43	1.41	1.03
876.89	7.36	7.46	7.33	7.43	7.45	0.13	29.71	37.62	30.30	30.68	1.43	1.42	1.03
879.52	7.36	7.46	7.33	7.42	7.44	0.13	29.77	37.14	30.41	30.76	1.44	1.42	1.03
882.15	7.37	7.47	7.33	7.43	7.45	0.14	29.79	36.66	30.58	30.84	1.45	1.43	1.03
884.78	7.41	7.49	7.35	7.45	7.46	0.14	29.82	36.25	30.72	30.90	1.47	1.43	1.04
887.42	7.43	7.51	7.37	7.47	7.49	0.14	29.84	35.82	30.87	30.97	1.48	1.44	1.04
890.05	7.47	7.53	7.40	7.50	7.51	0.13	29.85	35.43	31.01	31.03	1.49	1.44	1.04
891.36	7.49	7.55	7.41	7.51	7.53	0.14	29.83	35.27	31.08	31.06	1.49	1.44	1.04
892.68	7.51	7.57	7.43	7.53	7.56	0.14	29.82	35.08	31.16	31.09	1.50	1.44	1.04
894.00	7.54	7.57	7.44	7.54	7.56	0.13	29.82	34.90	31.22	31.11	1.51	1.45	1.05
934.60	8.03	7.94	7.61	7.74	8.00	0.42	28.55	30.75	32.61	30.53	1.71	1.53	1.09

1. Total Loss = Insertion Loss + 7dB splitter loss.



electrical schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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

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.

For detailed performance specs
& shopping online see web site

REV. C
M149087
ZB5PD-894-50W
HY/TD/CP/AM
150304