Coaxial

High Power Combiner

ZB5PD-894-50W

5 Way-0° 50Ω 800 to 894 MHz

CASE STYLE: BV278

Connectors	Model	Price	Qty.
SMA	ZB5PD-894-50W-S	$274.95	(1-9)

Maximum Ratings

Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C

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

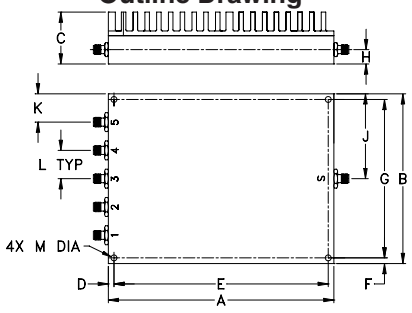
Features

- 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

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

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

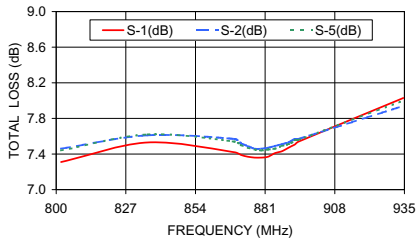
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

Typical Performance Data

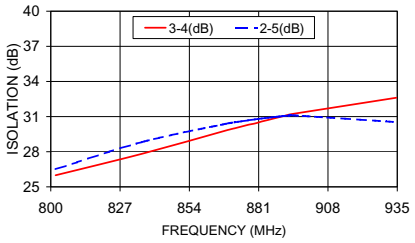
Freq. (MHz)	Total Loss[1] (dB)					Amp. Unbal. (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 5
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	3-4	2-5			
801.90	7.31	7.46	7.52	7.58	7.44	0.27	26.37	35.78	25.99	26.51	1.40	1.27	1.05
835.45	7.53	7.61	7.50	7.58	7.62	0.11	28.19	43.24	27.82	28.82	1.37	1.36	1.03
869.00	7.42	7.57	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.

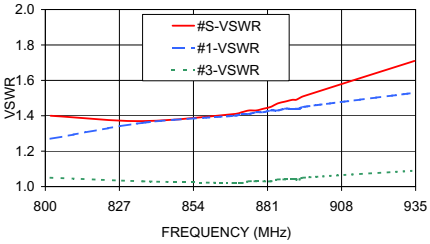
ZB5PD-894-50W
TOTAL LOSS



ZB5PD-894-50W
ISOLATION



ZB5PD-894-50W
VSWR



electrical schematic

REV. A
M127604
ZB5PD-894-50W
LC/TD/CP/AM
100617