NON-CATALOG

Coaxial

Power Splitter/Combiner

ZC9PD-1000

9 Way-0° 50Ω 800 to 1000 MHz

CASE STYLE: AB204

Connectors	Model	Price	Qty.
SMA	ZC9PD-1000-S	Contact Sales Dept.	

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	1.5W max.

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

Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,.....,9	1,2,3,.....,9

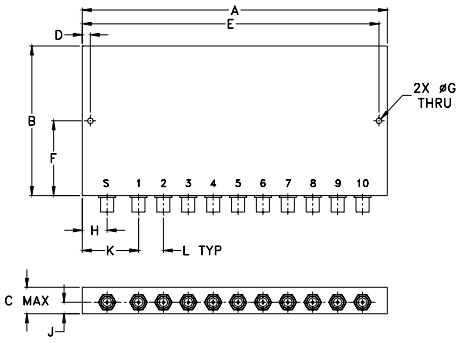
Features

- low insertion loss, 0.6 dB typ.
- high isolation, 30 dB typ.
- excellent output VSWR, 1.1:1 typ.
- rugged shielded case

Applications

- cellular
- UHF
- instrumentation
- signal processing

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
6.13	3.00	.53	.162	5.962	1.500
155.70	76.20	13.46	4.11	151.43	38.10

G	H	J	K	L	wt
.116	.50	.25	1.13	.50	grams
2.95	12.70	6.35	28.70	12.70	207

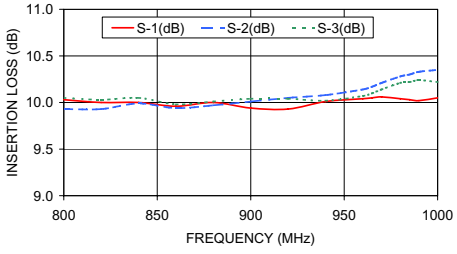
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 9.6 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
							S		OUT	
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.	Typ.	Max.	Typ.	Max.
800-1000	30	20	0.6	1.2	—	0.6	1.22	1.6	1.11	1.3

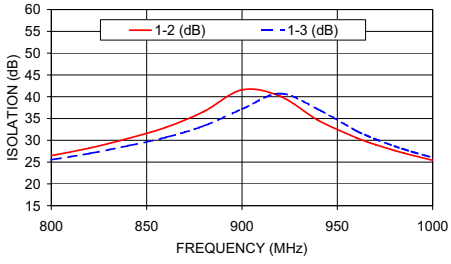
Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)			Amplitude Unbalance (dB)	Isolation (dB)		Phase unbalance (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3				
800.00	10.03	9.93	10.05	0.13	26.50	25.55	13.66	1.22	1.05	1.06
820.00	10.00	9.93	10.03	0.12	28.21	27.00	13.90	1.18	1.03	1.06
840.00	10.00	9.99	10.05	0.10	30.39	28.73	14.29	1.14	1.04	1.06
860.00	9.96	9.94	9.98	0.09	32.96	30.67	14.78	1.13	1.07	1.06
880.00	10.00	9.97	10.01	0.10	36.61	33.31	15.23	1.13	1.10	1.06
900.00	9.94	10.01	10.04	0.18	41.57	37.17	15.43	1.15	1.13	1.06
920.00	9.93	10.05	10.04	0.22	40.12	40.73	15.59	1.18	1.16	1.06
940.00	10.01	10.08	10.02	0.22	34.57	37.08	16.14	1.24	1.18	1.07
960.00	10.04	10.14	10.07	0.26	30.58	32.17	16.57	1.31	1.19	1.07
965.00	10.05	10.17	10.10	0.26	29.75	31.19	16.67	1.33	1.19	1.07
970.00	10.06	10.21	10.14	0.28	29.00	30.26	16.74	1.35	1.19	1.07
980.00	10.04	10.28	10.21	0.38	27.66	28.66	16.78	1.40	1.18	1.07
985.00	10.03	10.30	10.22	0.41	27.05	27.95	16.71	1.42	1.18	1.07
990.00	10.02	10.33	10.24	0.44	26.49	27.28	16.71	1.45	1.18	1.07
1000.00	10.05	10.35	10.22	0.43	25.42	26.06	16.79	1.50	1.17	1.07

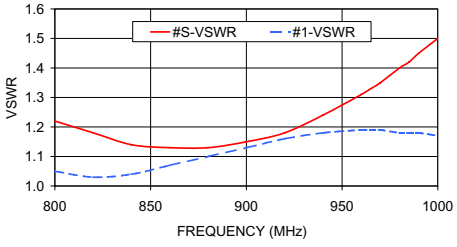
ZC9PD-1000
INSERTION LOSS



ZC9PD-1000
ISOLATION



ZC9PD-1000
VSWR



electrical schematic

For detailed performance specs & shopping online see web site

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.

REV. OR
M95083
ZC9PD-1000
090818

9 Way-0° Power Splitter/Combiner ZC9PD-1000

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS[1] (dB)			AMP. UNBAL. (dB)	ISOLATION (dB)		PHASE UNBAL. (deg.)
	S-1	S-2	S-3		1-2	1-3	
800.0	10.03	9.93	10.05	0.13	26.50	25.55	13.66
805.0	10.02	9.93	10.05	0.12	26.90	25.91	13.73
810.0	10.01	9.93	10.04	0.13	27.32	26.25	13.77
815.0	10.01	9.94	10.04	0.12	27.77	26.64	13.87
820.0	10.00	9.93	10.03	0.12	28.21	27.00	13.90
825.0	10.00	9.94	10.04	0.12	28.70	27.40	13.88
830.0	10.01	9.97	10.05	0.11	29.24	27.83	13.94
835.0	10.00	9.97	10.05	0.12	29.80	28.28	14.11
840.0	10.00	9.99	10.05	0.10	30.39	28.73	14.29
845.0	10.00	10.00	10.06	0.10	30.97	29.19	14.34
850.0	9.98	9.99	10.03	0.10	31.58	29.67	14.51
855.0	9.97	9.97	10.01	0.10	32.24	30.16	14.69
860.0	9.96	9.94	9.98	0.09	32.96	30.67	14.78
865.0	9.97	9.94	9.97	0.09	33.71	31.23	14.96
870.0	9.97	9.94	9.96	0.09	34.57	31.86	15.13
875.0	9.97	9.94	9.98	0.09	35.53	32.54	15.25
880.0	10.00	9.97	10.01	0.10	36.61	33.31	15.23
885.0	10.00	9.97	10.03	0.10	37.78	34.12	15.30
890.0	10.01	10.00	10.05	0.10	39.11	35.07	15.29
895.0	9.97	10.01	10.04	0.15	40.40	36.09	15.38
900.0	9.94	10.01	10.04	0.18	41.57	37.17	15.43
905.0	9.91	10.02	10.04	0.21	42.36	38.29	15.39
910.0	9.91	10.01	10.03	0.22	42.35	39.43	15.43
915.0	9.92	10.03	10.03	0.23	41.50	40.32	15.54
920.0	9.93	10.05	10.04	0.22	40.12	40.73	15.59
925.0	9.95	10.04	10.02	0.21	38.64	40.54	15.84
930.0	9.97	10.06	10.03	0.20	37.14	39.61	15.82
935.0	9.99	10.06	10.03	0.20	35.77	38.41	15.84
940.0	10.01	10.08	10.02	0.22	34.57	37.08	16.14
945.0	10.02	10.09	10.04	0.23	33.43	35.71	16.22
950.0	10.02	10.10	10.05	0.23	32.40	34.44	16.28
955.0	10.03	10.11	10.06	0.24	31.46	33.26	16.38
960.0	10.04	10.14	10.07	0.26	30.58	32.17	16.57
965.0	10.05	10.17	10.10	0.26	29.75	31.19	16.67
970.0	10.06	10.21	10.14	0.28	29.00	30.26	16.74
975.0	10.06	10.25	10.18	0.32	28.31	29.44	16.73
980.0	10.04	10.28	10.21	0.38	27.66	28.66	16.78
985.0	10.03	10.30	10.22	0.41	27.05	27.95	16.71
990.0	10.02	10.33	10.24	0.44	26.49	27.28	16.71
995.0	10.01	10.34	10.23	0.46	25.94	26.67	16.69
1000.0	10.05	10.35	10.22	0.43	25.42	26.06	16.79

FREQ. (MHz)	VSWR (:1)		
	S	1	3
800.0	1.22	1.05	1.06
805.0	1.21	1.04	1.06
810.0	1.20	1.04	1.06
815.0	1.19	1.03	1.06
820.0	1.18	1.03	1.06
825.0	1.17	1.03	1.06
830.0	1.16	1.03	1.06
835.0	1.15	1.04	1.06
840.0	1.14	1.04	1.06
845.0	1.14	1.05	1.06
850.0	1.13	1.05	1.06
855.0	1.13	1.06	1.06
860.0	1.13	1.07	1.06
865.0	1.13	1.08	1.06
870.0	1.13	1.08	1.06
875.0	1.13	1.09	1.06
880.0	1.13	1.10	1.06
885.0	1.13	1.11	1.06
890.0	1.14	1.12	1.06
895.0	1.14	1.12	1.06
900.0	1.15	1.13	1.06
905.0	1.16	1.14	1.06
910.0	1.17	1.14	1.06
915.0	1.17	1.15	1.06
920.0	1.18	1.16	1.06
925.0	1.20	1.16	1.07
930.0	1.21	1.17	1.07
935.0	1.22	1.17	1.07
940.0	1.24	1.18	1.07
945.0	1.25	1.18	1.07
950.0	1.27	1.18	1.07
955.0	1.29	1.18	1.07
960.0	1.31	1.19	1.07
965.0	1.33	1.19	1.07
970.0	1.35	1.19	1.07
975.0	1.37	1.19	1.07
980.0	1.40	1.18	1.07
985.0	1.42	1.18	1.07
990.0	1.45	1.18	1.07
995.0	1.47	1.18	1.07
1000.0	1.50	1.17	1.07

[1] Total Loss = Insertion Loss+ 9.6dB Splitter Loss

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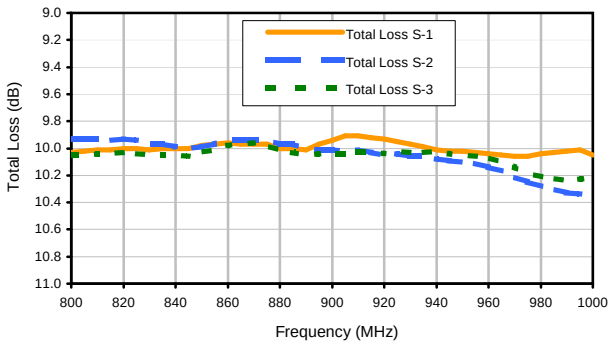
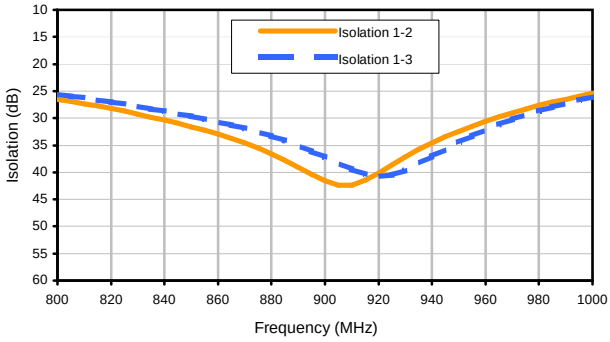
9 Way-0° Power Splitter/Combiner ZC9PD-1000

Typical Performance Curves

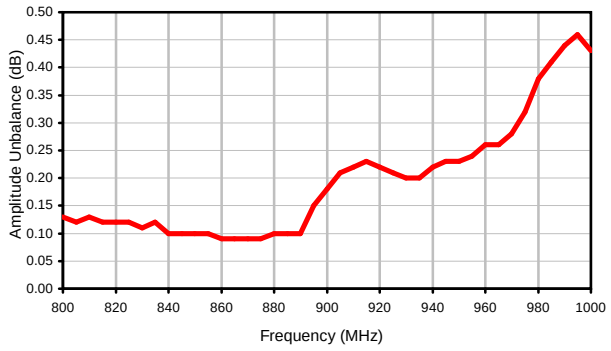
Total Loss



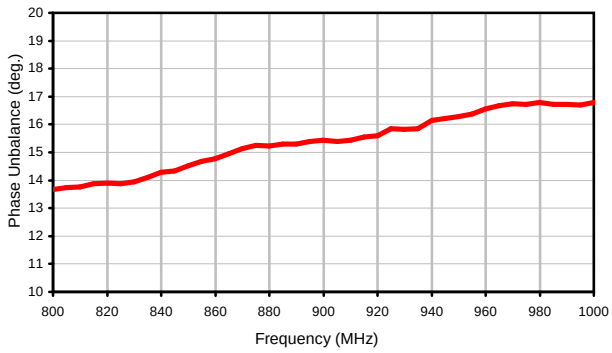
Isolation



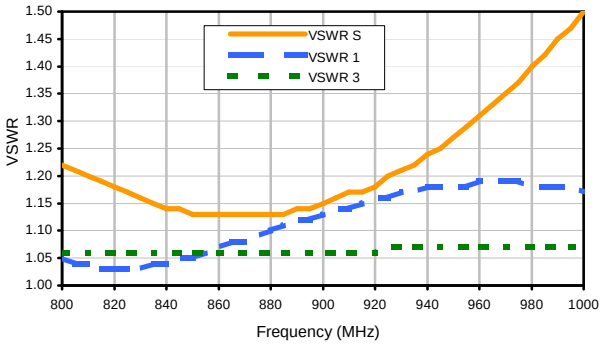
Amplitude Unbalance



Phase Unbalance



VSWR



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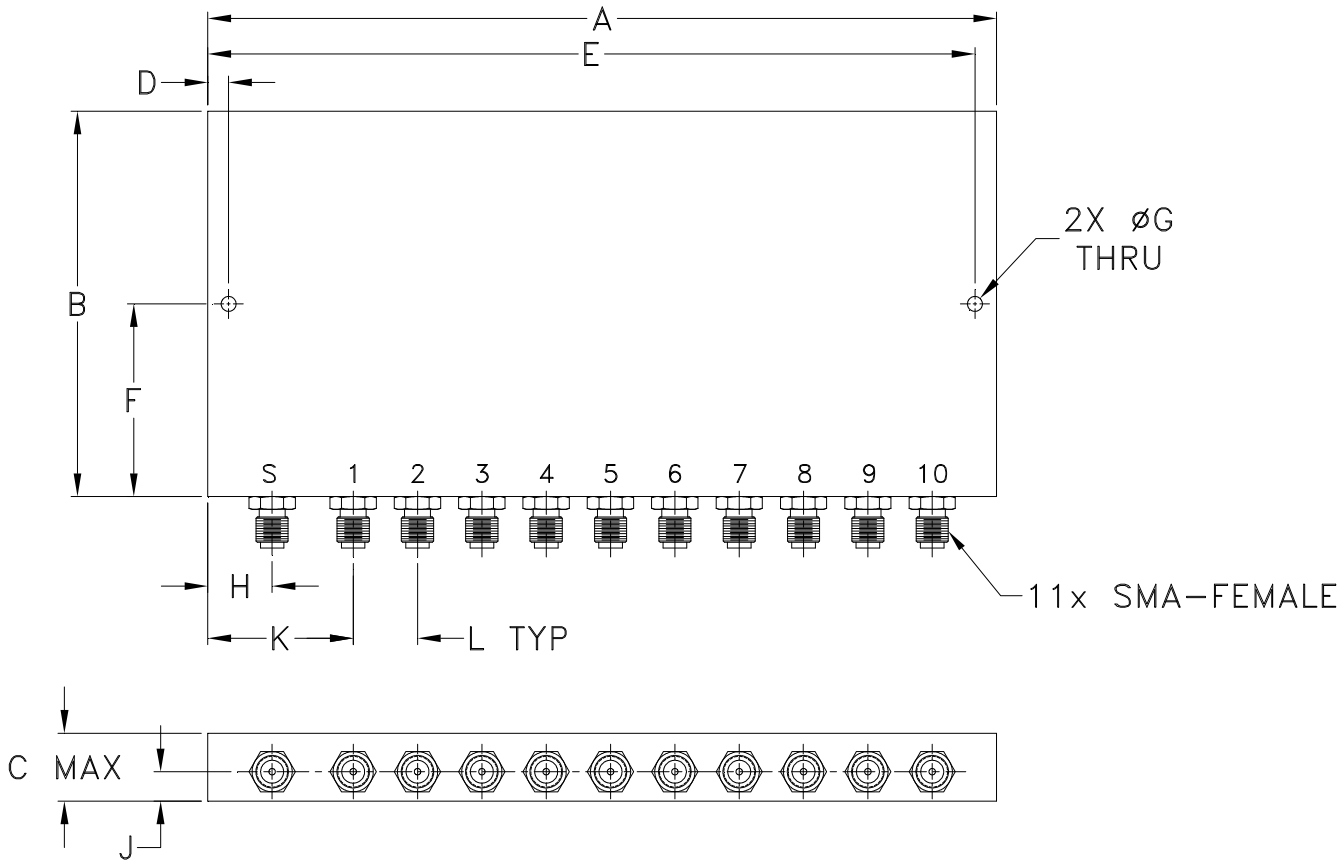
Case Style AB

AB204

Outline Dimensions



CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAM
AB204	6.13 (155.70)	3.00 (76.20)	.53 (13.46)	.162 (4.11)	5.962 (151.43)	1.500 (38.10)	.116 (2.95)	.50 (12.70)	.25 (6.35)	1.13 (28.70)	.50 (12.70)	207

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Notes:

1. Case material: Aluminum alloy.
2. Case finish:
   For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.

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Environmental Specifications ENV28

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I

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