

Coaxial

Power Splitter/Combiner

ZC10PD-900W

10 Way-0° 50Ω 750 to 900 MHz

Maximum Ratings

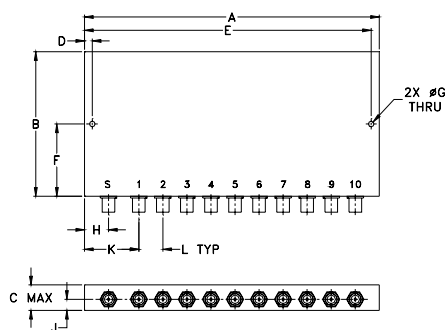
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	1.5W max.

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

Coaxial Connections

SUM PORT	S
PORT 1,2,3,.....,10	1,2,3,.....,10

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

Features

- low insertion loss, 0.4 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitter
- rugged shielded case

Applications

- UHF
- cellular
- communication systems



Generic photo used for illustration purposes only

CASE STYLE: AB204

Connectors	Model
SMA	ZC10PD-900W-S

Electrical Specifications

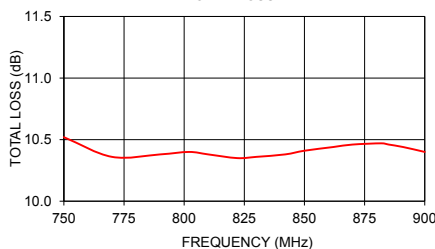
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 10 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L - f_U$	Typ. Min.	Typ. Max.	Max.	Max.
750-900	30 20	0.4 1.0	—	0.6

VSWR, input 1.2:1 typ., 1.6:1 max; output 1.2:1 typ., 1.35:1 max.

Typical Performance Data

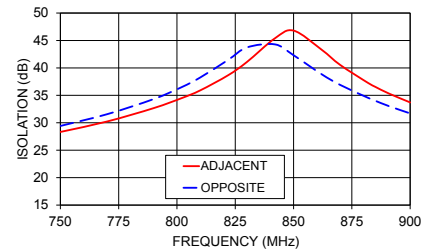
Freq. (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			1-2	1-5			
750.00	10.52	0.19	28.33	29.42	6.46	1.29	1.12
770.00	10.36	0.13	30.23	31.56	6.51	1.24	1.12
790.00	10.38	0.14	32.67	34.32	6.72	1.19	1.12
802.00	10.40	0.12	34.49	36.49	6.81	1.16	1.12
810.00	10.38	0.13	35.91	38.26	6.80	1.15	1.12
822.00	10.35	0.13	38.68	41.48	6.80	1.13	1.12
830.00	10.36	0.13	41.08	43.73	6.84	1.12	1.12
842.00	10.38	0.11	45.39	44.29	6.98	1.13	1.12
850.00	10.41	0.13	46.80	42.31	7.13	1.14	1.13
862.00	10.44	0.15	43.33	38.86	7.25	1.18	1.13
870.00	10.46	0.15	40.54	36.90	7.29	1.21	1.13
882.00	10.47	0.15	37.25	34.54	7.24	1.26	1.14
885.00	10.46	0.16	36.56	34.02	7.27	1.27	1.14
891.00	10.44	0.14	35.31	33.02	7.30	1.30	1.14
900.00	10.40	0.17	33.71	31.71	7.45	1.35	1.14

ZC10PD-900W-S
TOTAL LOSS

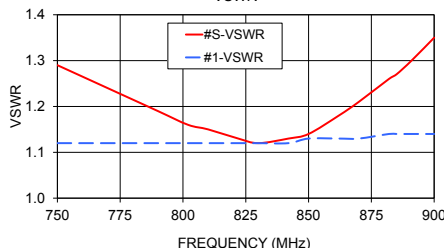


1. Total Loss = Insertion Loss + 10dB splitter loss.

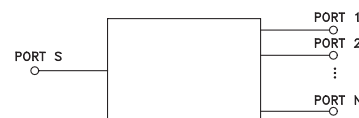
ZC10PD-900W-S
ISOLATION



ZC10PD-900W-S
VSWR



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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document 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



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ZC10PD-900W
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10 Way-0° Power Splitter/Combiner

ZC10PD-900W

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹ (dB)	AMP. UNBAL. (dB)	ISOLATION (dB)		PHASE UNBAL. (deg.)	FREQ. (MHz)	VSWR (:1)	
			Adjacent	Opposite			S	OUTPUTS
750.0	10.52	0.19	28.33	29.42	6.46	750.0	1.29	1.12
754.0	10.50	0.19	28.66	29.78	6.41	754.0	1.28	1.12
758.0	10.45	0.19	29.02	30.20	6.52	758.0	1.27	1.12
762.0	10.42	0.16	29.41	30.63	6.43	762.0	1.26	1.12
766.0	10.38	0.16	29.81	31.08	6.54	766.0	1.25	1.12
770.0	10.36	0.13	30.23	31.56	6.51	770.0	1.24	1.12
774.0	10.34	0.13	30.67	32.06	6.59	774.0	1.23	1.12
778.0	10.34	0.13	31.13	32.57	6.70	778.0	1.22	1.12
782.0	10.35	0.12	31.64	33.12	6.65	782.0	1.21	1.12
786.0	10.37	0.13	32.14	33.70	6.82	786.0	1.20	1.12
790.0	10.38	0.14	32.67	34.32	6.72	790.0	1.19	1.12
794.0	10.39	0.11	33.21	35.02	6.77	794.0	1.18	1.12
798.0	10.39	0.12	33.84	35.74	6.84	798.0	1.17	1.12
802.0	10.40	0.12	34.49	36.49	6.81	802.0	1.16	1.12
806.0	10.39	0.15	35.19	37.36	6.73	806.0	1.16	1.12
810.0	10.38	0.13	35.91	38.26	6.80	810.0	1.15	1.12
814.0	10.36	0.12	36.76	39.22	6.82	814.0	1.14	1.12
818.0	10.36	0.13	37.68	40.34	6.87	818.0	1.13	1.12
822.0	10.35	0.13	38.68	41.48	6.80	822.0	1.13	1.12
826.0	10.35	0.13	39.77	42.63	6.80	826.0	1.13	1.12
830.0	10.36	0.13	41.08	43.73	6.84	830.0	1.12	1.12
834.0	10.36	0.12	42.42	44.45	6.95	834.0	1.12	1.12
838.0	10.37	0.12	43.96	44.64	6.95	838.0	1.12	1.12
842.0	10.38	0.11	45.39	44.29	6.98	842.0	1.13	1.12
846.0	10.39	0.11	46.54	43.42	7.05	846.0	1.13	1.12
850.0	10.41	0.13	46.80	42.31	7.13	850.0	1.14	1.13
854.0	10.42	0.13	46.13	41.05	7.16	854.0	1.15	1.13
858.0	10.43	0.14	44.75	39.95	7.24	858.0	1.16	1.13
862.0	10.44	0.15	43.33	38.86	7.25	862.0	1.18	1.13
866.0	10.45	0.14	41.87	37.83	7.26	866.0	1.19	1.13
870.0	10.46	0.15	40.54	36.90	7.29	870.0	1.21	1.13
873.0	10.47	0.15	39.66	36.25	7.27	873.0	1.22	1.13
876.0	10.48	0.16	38.75	35.65	7.24	876.0	1.23	1.13
879.0	10.47	0.15	37.98	35.09	7.30	879.0	1.24	1.13
882.0	10.47	0.15	37.25	34.54	7.24	882.0	1.26	1.14
885.0	10.46	0.16	36.56	34.02	7.27	885.0	1.27	1.14
888.0	10.45	0.14	35.91	33.52	7.33	888.0	1.29	1.14
891.0	10.44	0.14	35.31	33.02	7.30	891.0	1.30	1.14
894.0	10.42	0.15	34.79	32.57	7.32	894.0	1.32	1.14
897.0	10.42	0.15	34.20	32.11	7.45	897.0	1.33	1.14
900.0	10.40	0.17	33.71	31.71	7.45	900.0	1.35	1.14

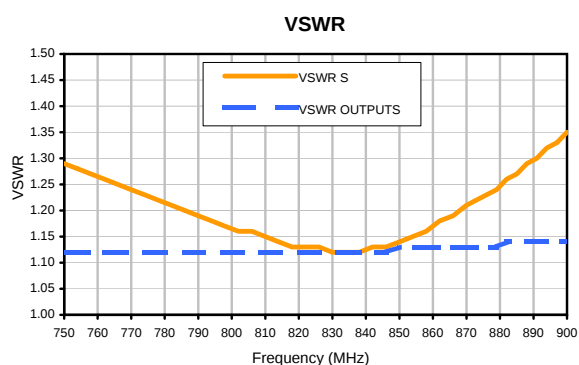
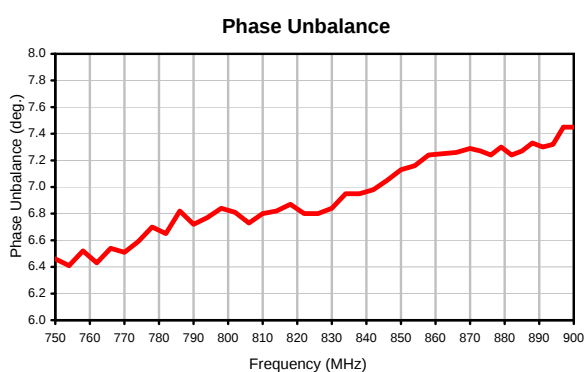
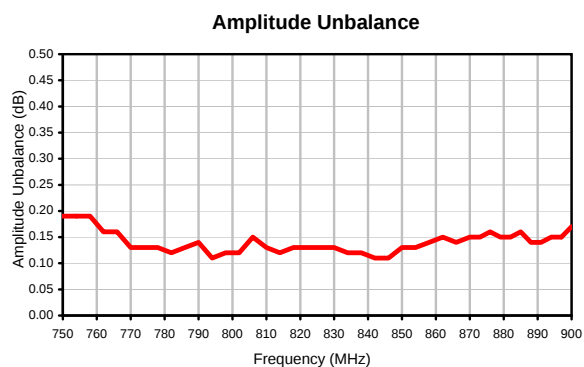
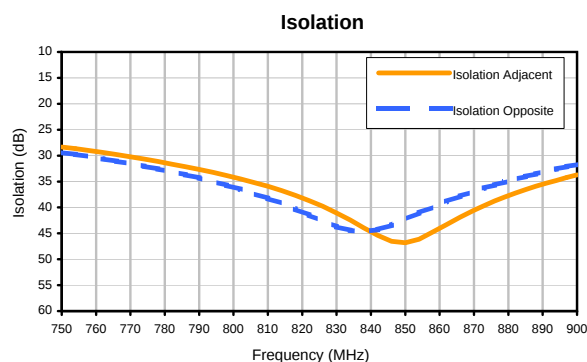
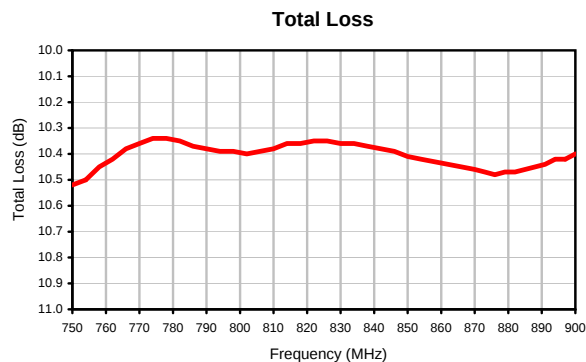
¹ Total Loss = Insertion Loss+ 10dB Splitter Loss

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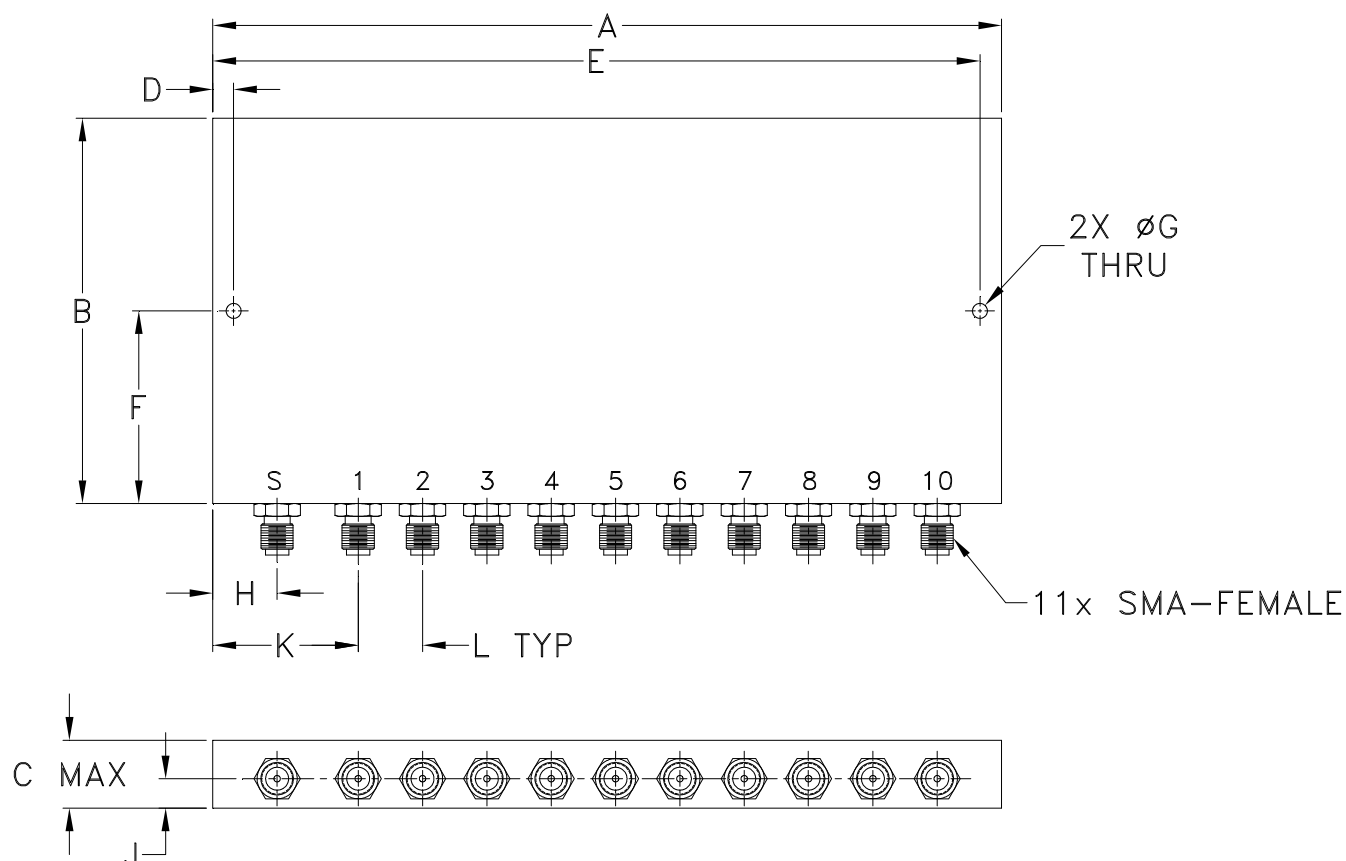
10 Way-0° Power Splitter/Combiner

ZC10PD-900W

Typical Performance Curves



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. $\pm .03$; 3Pl. $\pm .015$

Notes:

- Case material: Aluminum alloy.
- Case finish:

For RoHS Case Styles:

Clear chemical conversion coating, non-chrome or trivalent chrome based.



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RF/IF MICROWAVE COMPONENTS



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