

Power Splitter/Combiner

6 Way-0° 50Ω 1500 to 1700 MHz

Maximum Ratings

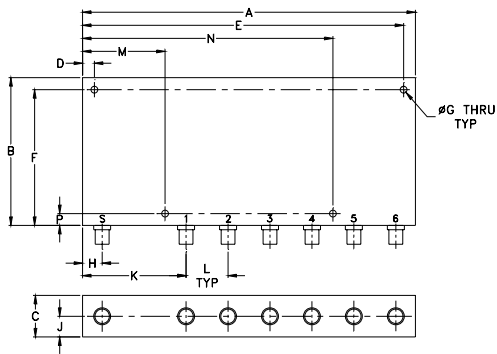
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.750W max.
DC Current	1.8A(300mA for each port)

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

Coaxial Connections

SUM PORT	S
PORT 1,2,3,4,5,6	1,2,3,4,5,6

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
7.06	3.13	.88	.250	6.810	2.875	.144	.42
179.32	79.50	22.35	6.35	172.97	73.03	3.66	10.67
J	K	L	M	N	P	wt	
.44	2.20	.89	1.750	5.310	.250	grams	
11.18	55.88	22.61	44.45	134.87	6.35	800	

Features

- high isolation, 30 dB typ.
- low insertion loss, 0.5 dB typ.
- rugged, shielded case
- up to 10W power input as splitter

Applications

- UHF/GPS
- instrumentation
- signal processing

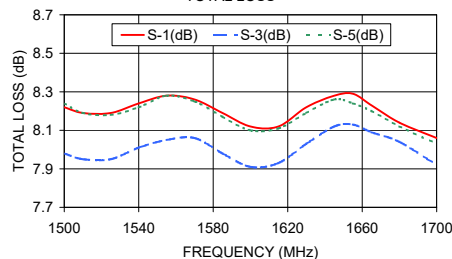
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 7.8 dB	AMPLITUDE UNBALANCE (dB)	VSWR (:1)
f_L - f_U	Typ. Min.	Typ. Max.	Max.	S Typ. Max. OUT Typ. Max.
1500-1700	30 20	0.5 1.0	0.6	1.15 1.5 1.3 1.5

Typical Performance Data

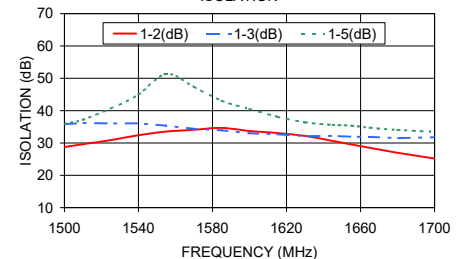
Frequency (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3	1-5				
1500.00	8.22	7.98	8.24	0.26	28.76	35.78	35.94	106.97	1.04	1.17	1.16
1510.00	8.19	7.95	8.19	0.26	29.63	36.21	37.19	107.57	1.02	1.18	1.16
1525.00	8.19	7.95	8.18	0.25	30.88	36.03	40.62	108.71	1.05	1.20	1.15
1540.00	8.24	8.01	8.22	0.24	32.39	36.09	44.99	109.66	1.08	1.20	1.14
1555.00	8.28	8.05	8.28	0.23	33.52	35.34	51.38	110.72	1.11	1.20	1.14
1570.00	8.26	8.06	8.25	0.22	34.08	34.37	47.35	111.85	1.14	1.20	1.15
1585.00	8.19	7.98	8.17	0.22	34.67	33.92	43.05	112.86	1.17	1.20	1.15
1600.00	8.12	7.91	8.10	0.23	33.71	33.02	40.54	113.87	1.19	1.20	1.15
1615.00	8.12	7.93	8.11	0.22	33.08	32.68	38.10	114.96	1.20	1.20	1.16
1630.00	8.22	8.03	8.19	0.21	32.16	32.12	36.38	116.08	1.22	1.20	1.15
1645.00	8.28	8.12	8.26	0.18	30.63	32.20	35.61	117.10	1.22	1.20	1.15
1655.00	8.29	8.13	8.24	0.17	29.55	31.91	35.33	117.91	1.21	1.19	1.16
1665.00	8.23	8.09	8.20	0.17	28.51	31.89	34.71	118.58	1.20	1.18	1.18
1680.00	8.14	8.04	8.12	0.15	26.98	31.49	34.03	119.99	1.18	1.15	1.21
1700.00	8.06	7.92	8.03	0.15	25.19	31.74	33.45	121.58	1.16	1.16	1.22

ZB6PD-1700
TOTAL LOSS

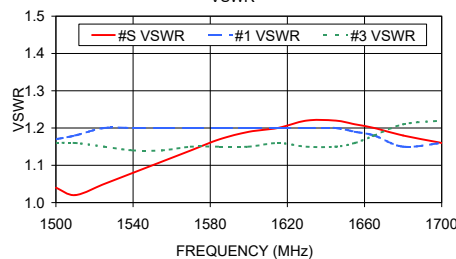


1. Total Loss = Insertion Loss + 7.8dB splitter loss.

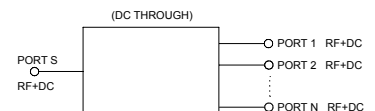
ZB6PD-1700
ISOLATION



ZB6PD-1700
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-Circuits' 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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CASE STYLE: AB1232

Connectors	Model
SMA	ZB6PD-1700-S
N-Type	ZB6PD-1700-N

6 Way-0° Power Splitter/Combiner

ZB6PD-1700

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹			AMP. UNBAL. (dB)	ISOLATION			FREQ. (MHz)	VSWR		
	S-1	S-3	S-5		1-2	1-3	1-5		S	1	3
1500.0	8.22	7.98	8.24	0.26	28.76	35.78	35.94	1500.0	1.04	1.17	1.16
1505.0	8.21	7.95	8.18	0.26	29.22	36.09	36.45	1505.0	1.03	1.18	1.16
1510.0	8.19	7.95	8.19	0.26	29.63	36.21	37.19	1510.0	1.02	1.18	1.16
1515.0	8.19	7.95	8.18	0.26	30.04	36.10	38.44	1515.0	1.03	1.19	1.16
1520.0	8.19	7.97	8.19	0.25	30.43	36.43	39.36	1520.0	1.04	1.19	1.15
1525.0	8.19	7.95	8.18	0.25	30.88	36.03	40.62	1525.0	1.05	1.20	1.15
1530.0	8.20	7.98	8.20	0.23	31.41	36.19	41.72	1530.0	1.06	1.20	1.14
1535.0	8.21	7.98	8.21	0.26	32.02	36.02	43.92	1535.0	1.07	1.20	1.14
1540.0	8.24	8.01	8.22	0.24	32.39	36.09	44.99	1540.0	1.08	1.20	1.14
1545.0	8.25	8.01	8.24	0.26	32.65	35.96	45.71	1545.0	1.10	1.20	1.14
1550.0	8.26	8.03	8.24	0.25	33.01	35.71	48.79	1550.0	1.11	1.20	1.14
1555.0	8.28	8.05	8.28	0.23	33.52	35.34	51.38	1555.0	1.11	1.20	1.14
1560.0	8.27	8.05	8.26	0.23	33.79	35.06	50.32	1560.0	1.12	1.20	1.15
1565.0	8.27	8.06	8.26	0.22	34.13	34.82	48.79	1565.0	1.13	1.20	1.15
1570.0	8.26	8.06	8.25	0.22	34.08	34.37	47.35	1570.0	1.14	1.20	1.15
1575.0	8.25	8.05	8.24	0.23	34.24	34.41	46.67	1575.0	1.15	1.20	1.15
1580.0	8.23	8.02	8.21	0.23	34.19	34.06	45.65	1580.0	1.16	1.20	1.15
1585.0	8.19	7.98	8.17	0.22	34.67	33.92	43.05	1585.0	1.17	1.20	1.15
1590.0	8.16	7.94	8.14	0.22	34.35	33.55	42.32	1590.0	1.18	1.20	1.15
1595.0	8.13	7.94	8.13	0.21	34.20	33.44	41.93	1595.0	1.18	1.20	1.15
1600.0	8.12	7.91	8.10	0.23	33.71	33.02	40.54	1600.0	1.19	1.20	1.15
1605.0	8.12	7.92	8.10	0.21	33.63	33.25	40.00	1605.0	1.20	1.20	1.15
1610.0	8.11	7.91	8.09	0.21	33.13	32.55	38.53	1610.0	1.21	1.20	1.15
1615.0	8.12	7.93	8.11	0.22	33.08	32.68	38.10	1615.0	1.20	1.20	1.16
1620.0	8.15	7.97	8.15	0.22	32.64	32.43	37.63	1620.0	1.21	1.20	1.16
1625.0	8.20	8.01	8.18	0.20	32.40	32.34	37.29	1625.0	1.21	1.20	1.16
1630.0	8.22	8.03	8.19	0.21	32.16	32.12	36.38	1630.0	1.22	1.20	1.15
1635.0	8.24	8.07	8.21	0.18	31.20	32.16	36.32	1635.0	1.22	1.20	1.15
1640.0	8.26	8.09	8.26	0.22	31.11	31.96	36.04	1640.0	1.22	1.20	1.15
1645.0	8.28	8.12	8.26	0.18	30.63	32.20	35.61	1645.0	1.22	1.20	1.15
1650.0	8.30	8.12	8.26	0.20	30.15	32.02	35.36	1650.0	1.22	1.20	1.16
1655.0	8.29	8.13	8.24	0.17	29.55	31.91	35.33	1655.0	1.21	1.19	1.16
1660.0	8.25	8.13	8.21	0.15	29.04	31.69	34.89	1660.0	1.21	1.18	1.17
1665.0	8.23	8.09	8.20	0.17	28.51	31.89	34.71	1665.0	1.20	1.18	1.18
1670.0	8.20	8.07	8.18	0.14	27.87	31.43	34.44	1670.0	1.20	1.17	1.19
1675.0	8.18	8.05	8.14	0.15	27.63	31.75	34.07	1675.0	1.19	1.16	1.20
1680.0	8.14	8.04	8.12	0.15	26.98	31.49	34.03	1680.0	1.18	1.15	1.21
1685.0	8.13	8.00	8.10	0.15	26.47	31.75	33.97	1685.0	1.18	1.15	1.22
1690.0	8.13	7.97	8.09	0.17	25.96	31.72	33.83	1690.0	1.17	1.15	1.22
1695.0	8.10	7.96	8.04	0.14	25.60	31.45	33.66	1695.0	1.16	1.16	1.22
1700.0	8.06	7.92	8.03	0.15	25.19	31.74	33.45	1700.0	1.16	1.16	1.22

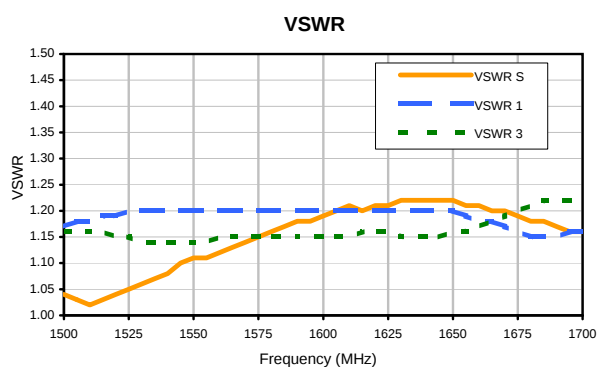
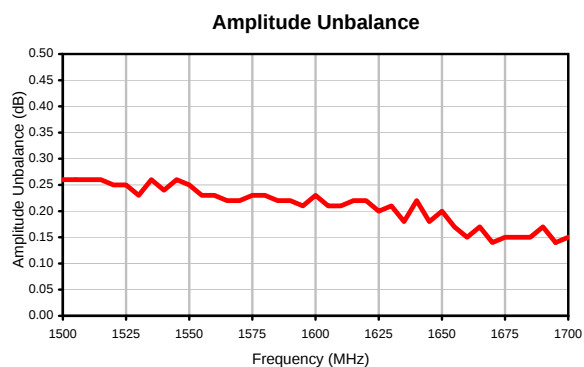
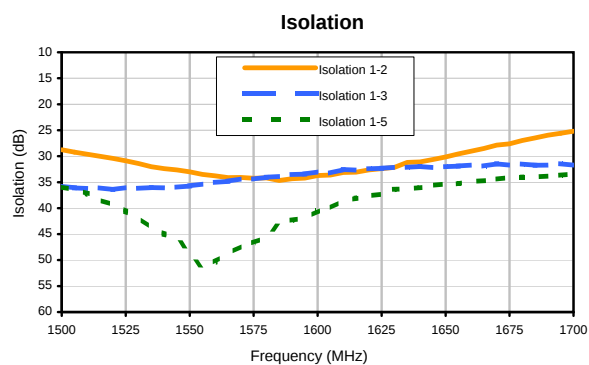
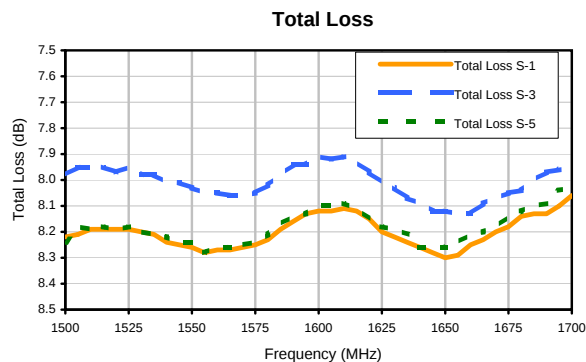
¹ Total Loss = Insertion Loss+ 7.8dB Splitter Loss

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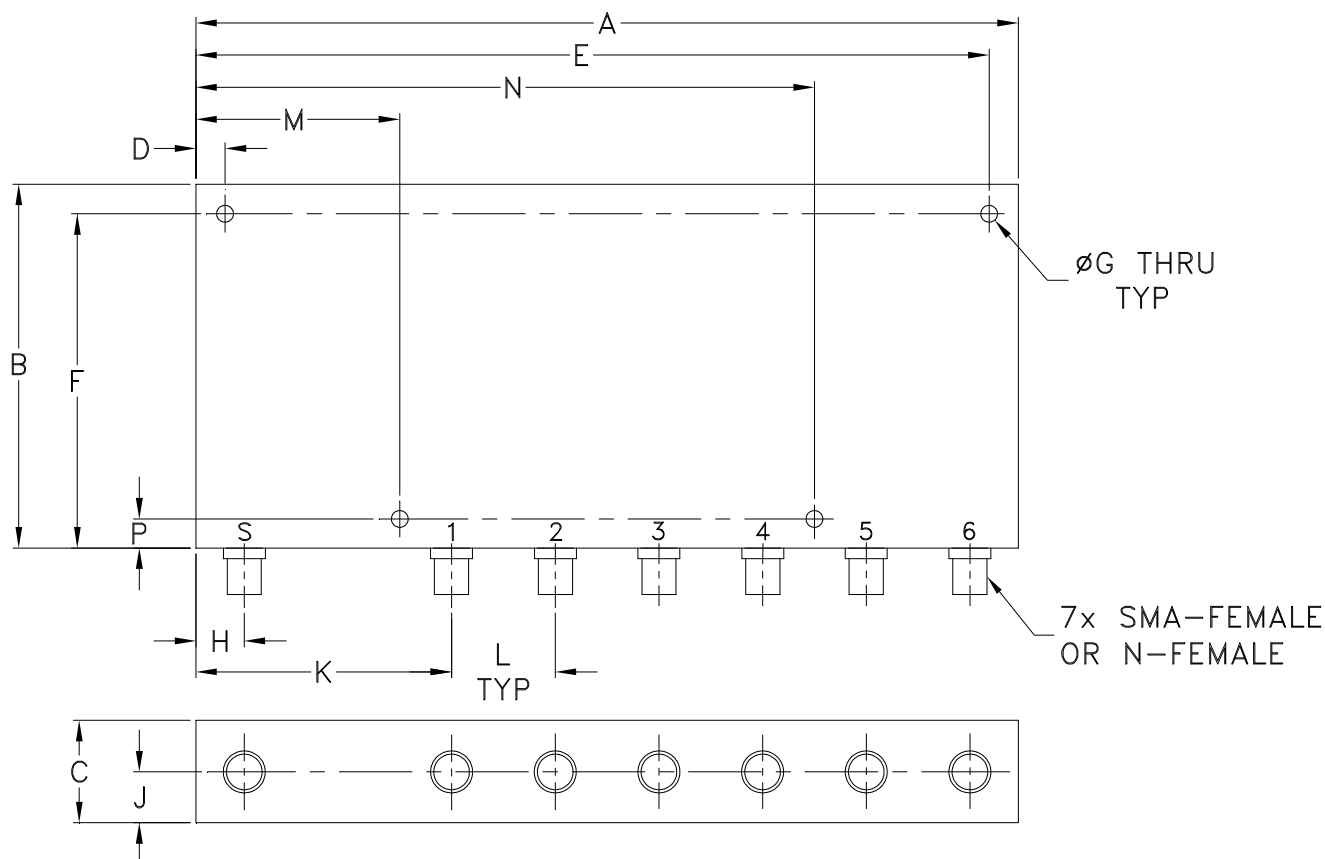
6 Way-0° Power Splitter/Combiner

ZB6PD-1700

Typical Performance Curves



Outline Dimensions



CASE #	A	B	C	D	E	F	G	H	J	K	L	M
AB1232	7.06 (179.32)	3.13 (79.50)	.88 (22.35)	.250 (6.35)	6.810 (172.97)	2.875 (73.03)	.144 (3.66)	.42 (10.67)	.44 (11.18)	2.20 (55.88)	.89 (22.61)	1.750 (44.45)

CASE #	N	P	WT.GRAMS
AB1232	5.310 (134.87)	.250 (6.35)	800

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.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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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