

# Power Splitter/Combiner

## ZB6PD-2+

6 Way 50Ω 800 to 2000 MHz



HT-Series  
Tight Spot  
SMA Wrench  
From \$24.95

### Maximum Ratings

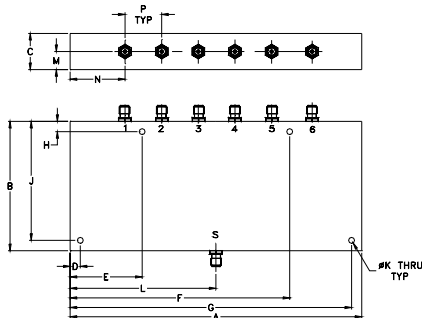
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.875W max.
DC Current	1.8A(300mA for each port)

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	1.750	5.310	6.810	.250
179.32	79.50	22.35	6.35	44.45	134.87	172.97	6.35
J	K	L	M	N	P	wt	
2.875	.144	3.53	.44	1.31	.89	grams	
73.03	3.66	89.66	11.18	33.27	22.61	800	

### Features

- wideband, 800 to 2000 MHz
- excellent VSWR, 1.1:1 typ. output
- high isolation, 27dB typ.
- rugged, shielded case
- up to 10W power input as splitter

### Applications

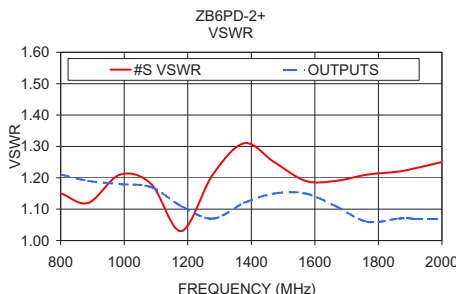
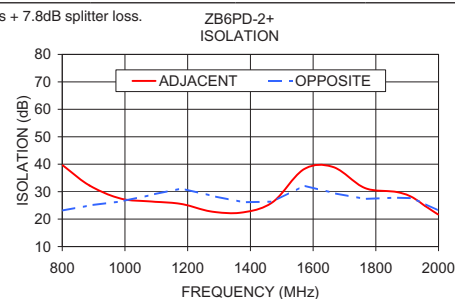
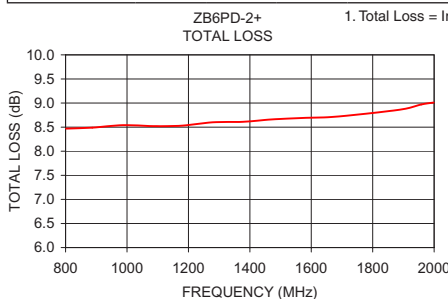
- cellular
- PCN
- instrumentation
- satellite distribution

### Electrical Specifications

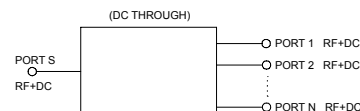
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 7.8 dB		AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
	Typ.	Min.	Typ.	Max.		S		OUT	
f <sub>L</sub> -f <sub>U</sub>					Max.	Typ.	Max.	Typ.	Max.
800-2000	27	17	0.7	1.7	0.7	1.2	1.6	1.13	1.3

### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)	Amplitude Unbalance (dB)	Isolation (dB)		VSWR S	VSWR OUTPUTS
			Adjacent	Opposite		
			801.50	8.47		
887.00	8.49	0.31	32.26	24.98	1.12	1.19
986.50	8.54	0.33	27.48	26.44	1.21	1.18
1085.00	8.52	0.31	26.40	28.83	1.18	1.17
1179.50	8.53	0.31	25.53	31.14	1.03	1.11
1278.50	8.60	0.31	22.70	28.45	1.21	1.07
1377.50	8.61	0.30	22.46	26.13	1.31	1.12
1472.00	8.66	0.30	26.27	26.38	1.25	1.15
1571.00	8.69	0.27	38.21	32.21	1.19	1.15
1665.00	8.71	0.26	38.95	29.48	1.19	1.11
1764.50	8.77	0.33	31.36	27.36	1.21	1.06
1863.50	8.84	0.30	29.93	27.81	1.22	1.07
1913.00	8.89	0.32	28.17	27.62	1.23	1.07
1958.00	8.97	0.34	24.73	25.52	1.24	1.07
1998.50	9.01	0.35	21.70	23.15	1.25	1.07



### electrical schematic



### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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# 6 Way-0° Power Splitter/Combiner

# ZB6PD-2+

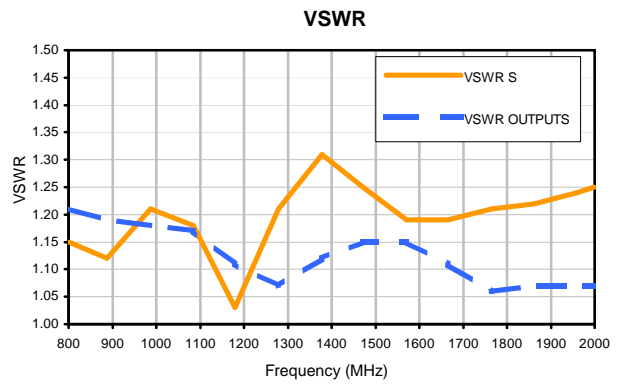
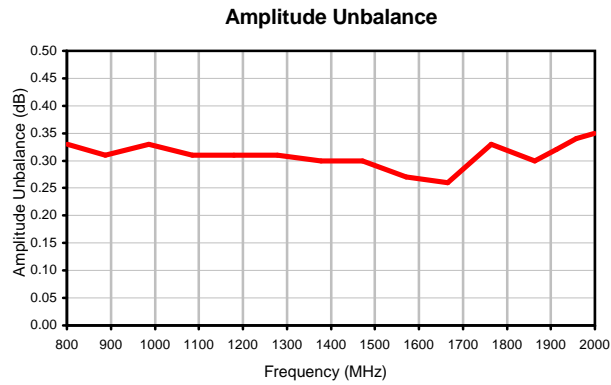
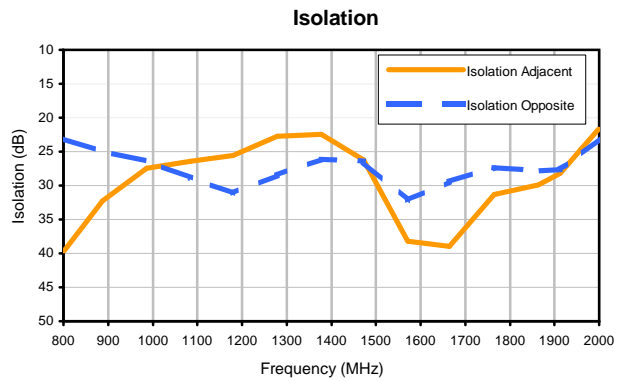
## Typical Performance Data

FREQ. (MHz)	INSERTION LOSS (dB)	AMP. UNBAL. (dB)	ISOLATION (dB)		FREQ. (MHz)	VSWR (:1)	
			Adjacent	Opposite		S	OUTPUTS
801.5	8.47	0.33	39.60	23.12	801.5	1.15	1.21
887.0	8.49	0.31	32.26	24.98	887.0	1.12	1.19
986.5	8.54	0.33	27.48	26.44	986.5	1.21	1.18
1085.0	8.52	0.31	26.40	28.83	1085.0	1.18	1.17
1179.5	8.53	0.31	25.53	31.14	1179.5	1.03	1.11
1278.5	8.60	0.31	22.70	28.45	1278.5	1.21	1.07
1377.5	8.61	0.30	22.46	26.13	1377.5	1.31	1.12
1472.0	8.66	0.30	26.27	26.38	1472.0	1.25	1.15
1571.0	8.69	0.27	38.21	32.21	1571.0	1.19	1.15
1665.0	8.71	0.26	38.95	29.48	1665.0	1.19	1.11
1764.5	8.77	0.33	31.36	27.36	1764.5	1.21	1.06
1863.5	8.84	0.30	29.93	27.81	1863.5	1.22	1.07
1913.0	8.89	0.32	28.17	27.62	1913.0	1.23	1.07
1958.0	8.97	0.34	24.73	25.52	1958.0	1.24	1.07
1998.5	9.01	0.35	21.70	23.15	1998.5	1.25	1.07

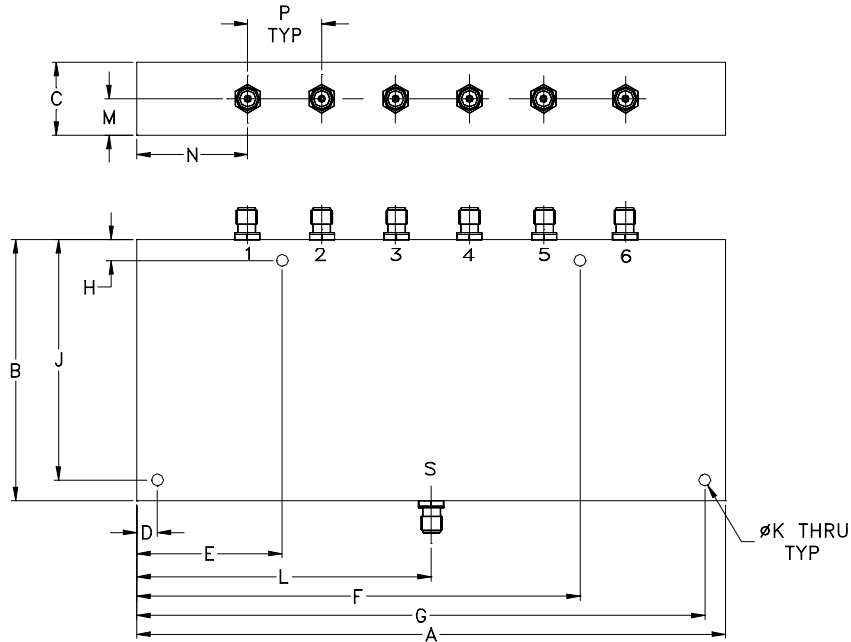
# 6 Way-0° Power Splitter/Combiner

# ZB6PD-2+

## Typical Performance Curves



### Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
Z259	7.06 (179.32)	3.13 (79.50)	.88 (22.35)	.250 (6.35)	1.750 (44.45)	5.310 (134.87)	6.810 (172.97)	.250 (6.35)	2.875 (73.03)	.144 (3.66)	3.53 (89.66)	.44 (11.18)	1.31 (33.27)

CASE#	P	WT.GRAMS
Z259	.89 (22.61)	800

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

#### 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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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.

<b>Specification</b>	<b>Test/Inspection Condition</b>	<b>Reference/Spec</b>
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