

Coaxial

# Power Splitter/Combiner

2 Way-0° 50Ω 500 to 1000 MHz

ZAPD-1+

www.minicircuits.com



N-Type version shown  
CASE STYLE: F14

| Connectors | Model       | Price   | Qty.  |
|------------|-------------|---------|-------|
| BNC        | ZAPD-1(+)   | \$59.95 | (1-9) |
| SMA        | ZAPD-1-S(+) | \$64.95 | (1-9) |
| N-TYPE     | ZAPD-1-N(+) | \$64.95 | (1-9) |

+ RoHS compliant in accordance  
with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site  
for RoHS Compliance methodologies and qualifications.

## 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        | 0.125W max.    |

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

## Coaxial Connections

|          |   |
|----------|---|
| SUM PORT | S |
| PORT 1   | 1 |
| PORT 2   | 2 |

## Features

- wideband, 500 to 1000 MHz
- low insertion loss, 0.25 dB typ.
- good isolation, 25 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.2 deg. typ.
- excellent VSWR, 1.1:1 typ.
- rugged shielded case

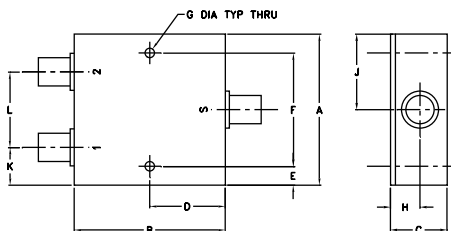
## Applications

- UHF
- cellular
- communications systems
- instrumentation

## Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) |     | INSERTION LOSS (dB) ABOVE 3.0 dB |      | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|-----|----------------------------------|------|---------------------------|--------------------------|
| $f_c - f_u$       | Typ.           | Min | Typ.                             | Max. | Max.                      | Max.                     |
| 500-1000          | 25             | 19  | 0.25                             | 0.6  | 2                         | 0.2                      |

## Outline Drawing



## Outline Dimensions (inch/mm)

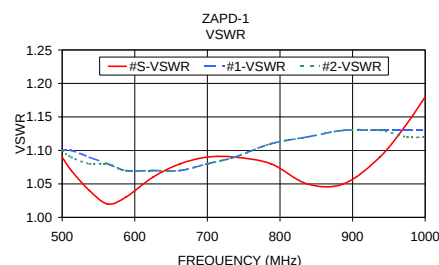
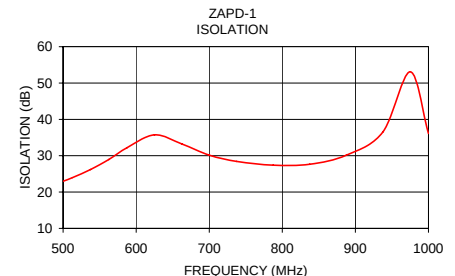
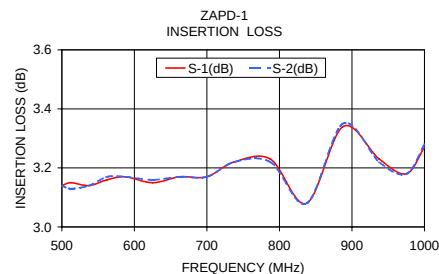
| A     | B     | C     | D     | E    | F     | G    |
|-------|-------|-------|-------|------|-------|------|
| 2.00  | 2.00  | .75   | 1.00  | .25  | 1.500 | .125 |
| 50.80 | 50.80 | 19.05 | 25.40 | 6.35 | 38.10 | 3.18 |

| H    | J     | K     | L     | wt    |
|------|-------|-------|-------|-------|
| .39  | 1.00  | .50   | 1.00  | grams |
| 9.91 | 25.40 | 12.70 | 25.40 | 170.0 |

## Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) |      | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|---------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
|                 | S-1                 | S-2  |                          |                |                        |        |        |        |
| 500.00          | 3.14                | 3.14 | 0.00                     | 22.98          | 0.10                   | 1.09   | 1.10   | 1.10   |
| 512.50          | 3.15                | 3.13 | 0.02                     | 23.95          | 0.07                   | 1.07   | 1.10   | 1.09   |
| 537.50          | 3.14                | 3.14 | 0.00                     | 26.20          | 0.02                   | 1.04   | 1.09   | 1.08   |
| 562.50          | 3.16                | 3.17 | 0.01                     | 28.96          | 0.07                   | 1.02   | 1.08   | 1.08   |
| 587.50          | 3.17                | 3.17 | 0.00                     | 32.19          | 0.13                   | 1.03   | 1.07   | 1.07   |
| 625.00          | 3.15                | 3.16 | 0.00                     | 35.73          | 0.08                   | 1.06   | 1.07   | 1.07   |
| 662.50          | 3.17                | 3.17 | 0.00                     | 33.23          | 0.13                   | 1.08   | 1.07   | 1.07   |
| 700.00          | 3.17                | 3.17 | 0.00                     | 30.16          | 0.09                   | 1.09   | 1.08   | 1.08   |
| 737.50          | 3.22                | 3.22 | 0.00                     | 28.42          | 0.10                   | 1.09   | 1.09   | 1.09   |
| 787.50          | 3.23                | 3.22 | 0.01                     | 27.39          | 0.13                   | 1.08   | 1.11   | 1.11   |
| 837.50          | 3.08                | 3.08 | 0.00                     | 27.65          | 0.10                   | 1.05   | 1.12   | 1.12   |
| 887.50          | 3.34                | 3.35 | 0.01                     | 30.13          | 0.11                   | 1.05   | 1.13   | 1.13   |
| 937.50          | 3.23                | 3.22 | 0.01                     | 36.50          | 0.24                   | 1.09   | 1.13   | 1.13   |
| 975.00          | 3.18                | 3.18 | 0.00                     | 53.09          | 0.19                   | 1.14   | 1.13   | 1.12   |
| 1000.00         | 3.27                | 3.28 | 0.01                     | 36.11          | 0.19                   | 1.18   | 1.13   | 1.12   |



## electrical schematic



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