

# Coaxial Power Splitter/Combiner

2 Way-0° 50Ω

2000 to 4200 MHz

**ZAPD-4+**  
**ZAPD-4**



N-Type version shown

CASE STYLE: F14

| Connectors | Model    | Price   | Qty.  |
|------------|----------|---------|-------|
| N-TYPE     | ZAPD-4-N | \$59.95 | (1-9) |
| SMA        | ZAPD-4-S | \$59.95 | (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.    |

## Coaxial Connections

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

## Features

- wideband, 2000 to 4200 MHz
- low insertion loss, 0.4 dB typ.
- good isolation, 25 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.5 deg. typ.
- rugged shielded case

## Applications

- MMDS
- ISM
- wireless
- communication systems
- instrumentation

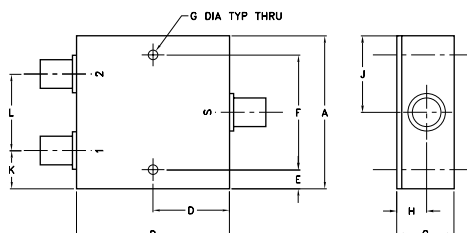
## Splitter Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) |      | INSERTION LOSS (dB) ABOVE 3.0 dB |      | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|------|----------------------------------|------|---------------------------|--------------------------|
| $f_L$ - $f_U$     | Typ.           | Min. | Typ.                             | Max. | Max.                      | Max.                     |
| 2000-4200         | 25             | 19   | 0.4                              | 0.8  | 6                         | 0.4                      |

## Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) S-1 | Insertion Loss (dB) S-2 | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|-------------------------|-------------------------|--------------------------|----------------|------------------------|--------|--------|--------|
| 2000.00         | 3.29                    | 3.28                    | 0.01                     | 21.06          | 0.12                   | 1.33   | 1.10   | 1.10   |
| 2055.00         | 3.32                    | 3.32                    | 0.00                     | 21.81          | 0.06                   | 1.32   | 1.11   | 1.11   |
| 2165.00         | 3.36                    | 3.36                    | 0.00                     | 23.52          | 0.02                   | 1.28   | 1.12   | 1.12   |
| 2275.00         | 3.28                    | 3.28                    | 0.01                     | 25.26          | 0.06                   | 1.26   | 1.12   | 1.13   |
| 2385.00         | 3.26                    | 3.26                    | 0.01                     | 27.29          | 0.06                   | 1.25   | 1.14   | 1.16   |
| 2550.00         | 3.21                    | 3.22                    | 0.01                     | 30.80          | 0.03                   | 1.23   | 1.16   | 1.19   |
| 2715.00         | 3.26                    | 3.26                    | 0.00                     | 34.52          | 0.07                   | 1.22   | 1.15   | 1.20   |
| 2880.00         | 3.27                    | 3.27                    | 0.01                     | 35.28          | 0.11                   | 1.24   | 1.19   | 1.25   |
| 3100.00         | 3.19                    | 3.19                    | 0.01                     | 31.23          | 0.05                   | 1.23   | 1.20   | 1.27   |
| 3320.00         | 3.30                    | 3.28                    | 0.02                     | 28.17          | 0.13                   | 1.25   | 1.22   | 1.28   |
| 3540.00         | 3.25                    | 3.23                    | 0.02                     | 26.28          | 0.06                   | 1.20   | 1.21   | 1.26   |
| 3760.00         | 3.31                    | 3.28                    | 0.02                     | 25.49          | 0.06                   | 1.16   | 1.15   | 1.20   |
| 3980.00         | 3.27                    | 3.24                    | 0.04                     | 25.51          | 0.02                   | 1.10   | 1.13   | 1.17   |
| 4090.00         | 3.16                    | 3.12                    | 0.03                     | 25.74          | 0.04                   | 1.09   | 1.10   | 1.15   |
| 4200.00         | 3.27                    | 3.24                    | 0.04                     | 25.99          | 0.02                   | 1.10   | 1.08   | 1.13   |

## Outline Drawing



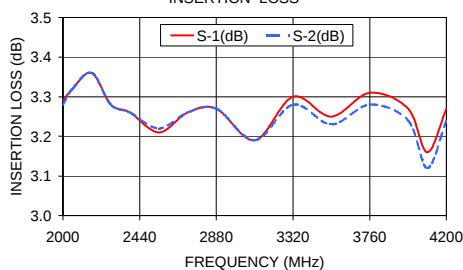
## Outline Dimensions (inch/mm)

| 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 |

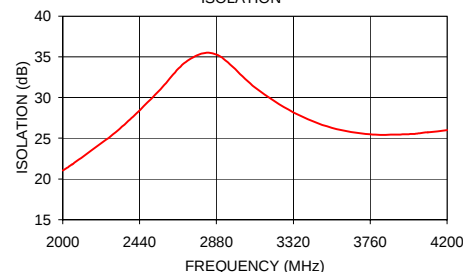
  

| H    | J     | K     | L     | wt    |
|------|-------|-------|-------|-------|
| .39  | 1.00  | .50   | 1.00  | grams |
| 9.91 | 25.40 | 12.70 | 25.40 | 170.0 |

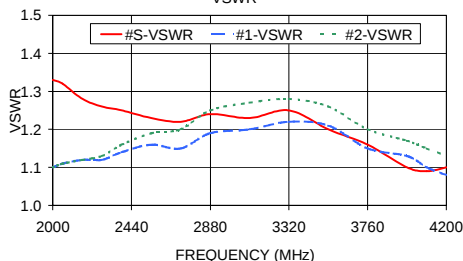
ZAPD-4  
INSERTION LOSS



ZAPD-4  
ISOLATION



ZAPD-4  
VSWR



## electrical schematic

