

Coaxial

# Power Splitter/Combiner

2 Way-0° 50Ω 500 to 5000 MHz

ZN2PD2-50+



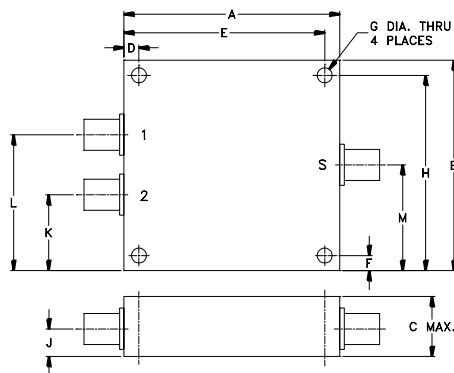
## Maximum Ratings

|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 10W max.       |
| Internal Dissipation        | 0.25W max.     |

## Coaxial Connections

|         |   |
|---------|---|
| SUMPORT | S |
| PORT 1  | 1 |
| PORT 2  | 2 |

## Outline Drawing



## Outline Dimensions (inch mm)

| A      | B     | C     | D     | E      | F     | G    |
|--------|-------|-------|-------|--------|-------|------|
| 4.50   | 2.50  | .67   | .400  | 4.100  | .125  | .125 |
| 114.30 | 63.50 | 17.02 | 10.16 | 104.14 | 3.18  | 3.18 |
| H      | J     | K     | L     | M      | wt    |      |
| 2.375  | .33   | .75   | 1.75  | 1.25   | grams |      |
| 60.33  | 8.38  | 19.05 | 44.45 | 31.75  | 247   |      |

## Features

- wideband, 500 to 5000 MHz
- excellent amplitude unbalance, 0.05 dB typ.
- excellent phase unbalance, 0.5 deg. typ.
- up to 10W power input as splitter

## Applications

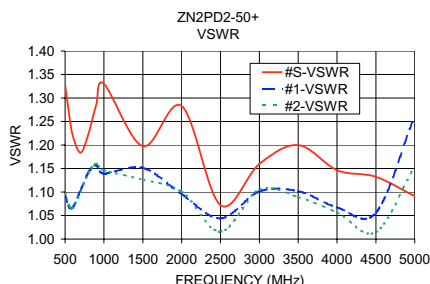
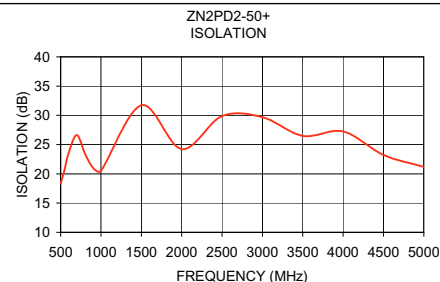
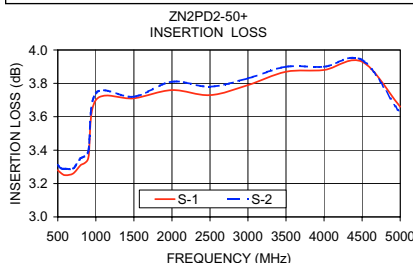
- UHF TV
- cellular/ISM/SMG/GSM
- satellite distribution
- GPS/L BAND (MARSAT)
- PCS/DCS/UMTS
- MMDS
- SATCOM

## Electrical Specifications

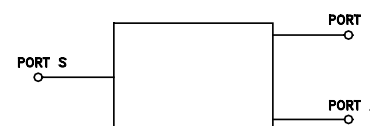
| FREQ.<br>RANGE<br>(MHz)        | ISOLATION<br>(dB) |      | INSERTION LOSS (dB)<br>ABOVE 3.0 dB |      | PHASE<br>UNBALANCE<br>(Degrees) | AMPLITUDE<br>UNBALANCE<br>(dB) | VSWR<br>(:1) |      |      |      |
|--------------------------------|-------------------|------|-------------------------------------|------|---------------------------------|--------------------------------|--------------|------|------|------|
|                                |                   |      |                                     |      |                                 |                                | S            |      | OUT  |      |
| f <sub>L</sub> -f <sub>U</sub> | Typ.              | Min. | Typ.                                | Max. | Max.                            | Max.                           | Typ.         | Max. | Typ. | Max. |
| 500-5000                       | 25                | 15   | 0.8                                 | 1.4  | 4                               | 0.5                            | 1.2          | —    | 1.1  | —    |
| 600-1600                       | 24                | 17   | 0.7                                 | 1.1  | 2                               | 0.3                            | 1.2          | —    | 1.1  | —    |
| 1600-2700                      | 26                | 18   | 0.8                                 | 1.2  | 3                               | 0.3                            | 1.2          | —    | 1.1  | —    |
| 2700-3600                      | 28                | 19   | 0.9                                 | 1.3  | 3                               | 0.4                            | 1.2          | —    | 1.1  | —    |
| 3700-4800                      | 22                | 18   | 0.9                                 | 1.4  | 4                               | 0.5                            | 1.2          | —    | 1.1  | —    |

## 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          | 3.28                | 3.31 | 0.04                     | 18.32          | 0.02                   | 1.33   | 1.09   | 1.10   |
| 550.00          | 3.26                | 3.29 | 0.03                     | 20.81          | 0.02                   | 1.27   | 1.07   | 1.07   |
| 600.00          | 3.25                | 3.29 | 0.04                     | 23.61          | 0.09                   | 1.22   | 1.07   | 1.07   |
| 700.00          | 3.26                | 3.29 | 0.03                     | 26.64          | 0.12                   | 1.18   | 1.10   | 1.10   |
| 800.00          | 3.31                | 3.35 | 0.04                     | 23.51          | 0.07                   | 1.22   | 1.14   | 1.14   |
| 900.00          | 3.35                | 3.39 | 0.04                     | 21.06          | 0.04                   | 1.29   | 1.16   | 1.16   |
| 1000.00         | 3.70                | 3.74 | 0.03                     | 20.52          | 0.12                   | 1.33   | 1.14   | 1.15   |
| 1500.00         | 3.71                | 3.72 | 0.01                     | 31.72          | 0.23                   | 1.20   | 1.15   | 1.13   |
| 2000.00         | 3.76                | 3.81 | 0.05                     | 24.24          | 0.19                   | 1.28   | 1.10   | 1.10   |
| 2500.00         | 3.73                | 3.78 | 0.06                     | 29.88          | 0.36                   | 1.07   | 1.04   | 1.02   |
| 3000.00         | 3.79                | 3.83 | 0.04                     | 29.70          | 0.48                   | 1.16   | 1.10   | 1.11   |
| 3500.00         | 3.87                | 3.90 | 0.02                     | 26.49          | 0.58                   | 1.20   | 1.10   | 1.09   |
| 4000.00         | 3.88                | 3.90 | 0.03                     | 27.25          | 0.54                   | 1.15   | 1.07   | 1.06   |
| 4500.00         | 3.93                | 3.94 | 0.01                     | 23.23          | 0.81                   | 1.13   | 1.06   | 1.01   |
| 5000.00         | 3.66                | 3.62 | 0.04                     | 21.19          | 1.03                   | 1.09   | 1.26   | 1.15   |



## electrical schematic



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