

Coaxial

# Power Splitter/Combiner

## ZN2PD-9G

2 Way-0° 50Ω 1700 to 9000 MHz



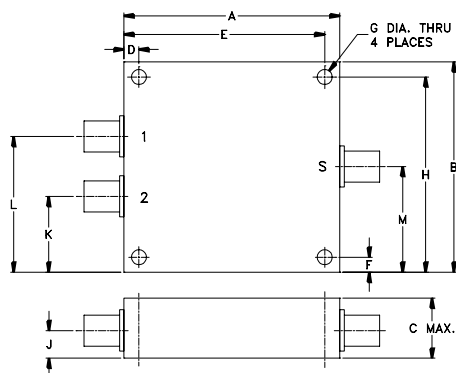
### Maximum Ratings

|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 10W max.       |
| Internal Dissipation        | 0.125W max.    |

### Coaxial Connections

|         |   |
|---------|---|
| SUPPORT | S |
| PORT 1  | 1 |
| PORT 2  | 2 |

### Outline Drawing



### Outline Dimensions (inch/mm)

|       |       |       |       |       |      |       |  |
|-------|-------|-------|-------|-------|------|-------|--|
| A     | B     | C     | D     | E     | F    | G     |  |
| 1.80  | 1.75  | .66   | .125  | 1.675 | .125 | .125  |  |
| 45.72 | 44.45 | 16.76 | 3.18  | 42.55 | 3.18 | 3.18  |  |
| H     | J     | K     | L     | M     |      | wt    |  |
| 1.625 | .31   | .63   | 1.13  | .88   |      | grams |  |
| 41.28 | 7.87  | 16.00 | 28.70 | 22.35 |      | 34    |  |

### Features

- very wideband, 1700 to 9000 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 22 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- rugged shielded case

### Applications

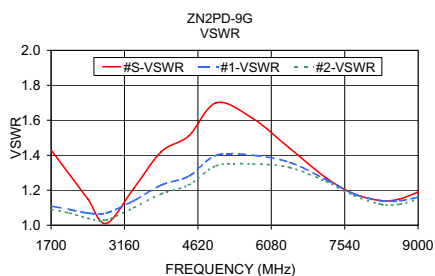
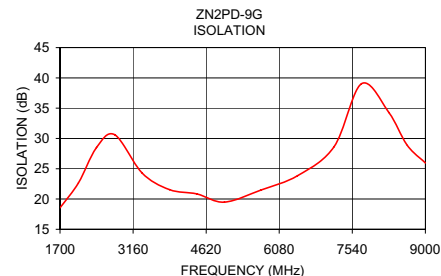
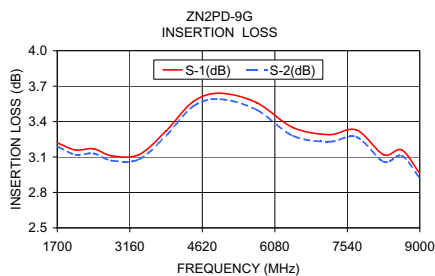
- UHF/VHF
- PCS/DCS
- defense & federal communications
- wireless

### Splitter Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) |      | INSERTION LOSS(dB) ABOVE 3.0 dB |      | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) | VSWR (:1) |      |      |      |
|-------------------|----------------|------|---------------------------------|------|---------------------------|--------------------------|-----------|------|------|------|
|                   | Typ.           | Min. | Typ.                            | Max. |                           |                          | S         |      | OUT  |      |
| $f_L$ - $f_U$     |                |      |                                 |      | Max.                      | Max.                     | Typ.      | Max. | Typ. | Max. |
| 1700-9000         | 22             | 15   | 0.5                             | 1.4  | 4                         | 0.6                      | -         | -    | -    | -    |

### 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  |                          |                |                        |        |        |        |
| 1700.00         | 3.22                | 3.19 | 0.03                     | 18.55          | 0.48                   | 1.43   | 1.11   | 1.09   |
| 2065.00         | 3.16                | 3.12 | 0.04                     | 22.62          | 0.57                   | 1.29   | 1.09   | 1.07   |
| 2430.00         | 3.17                | 3.13 | 0.04                     | 28.51          | 0.66                   | 1.15   | 1.07   | 1.04   |
| 2795.00         | 3.11                | 3.07 | 0.04                     | 30.61          | 0.66                   | 1.01   | 1.07   | 1.03   |
| 3342.50         | 3.12                | 3.08 | 0.05                     | 24.27          | 0.57                   | 1.21   | 1.14   | 1.10   |
| 3890.00         | 3.32                | 3.28 | 0.04                     | 21.55          | 0.65                   | 1.42   | 1.23   | 1.18   |
| 4437.50         | 3.57                | 3.53 | 0.04                     | 20.84          | 0.76                   | 1.51   | 1.28   | 1.23   |
| 4985.00         | 3.64                | 3.59 | 0.05                     | 19.48          | 0.92                   | 1.70   | 1.40   | 1.34   |
| 5715.00         | 3.56                | 3.50 | 0.06                     | 21.48          | 1.18                   | 1.61   | 1.40   | 1.35   |
| 6445.00         | 3.35                | 3.28 | 0.07                     | 23.84          | 1.11                   | 1.44   | 1.36   | 1.33   |
| 7175.00         | 3.29                | 3.23 | 0.06                     | 28.64          | 1.11                   | 1.27   | 1.26   | 1.25   |
| 7722.50         | 3.33                | 3.27 | 0.06                     | 39.04          | 1.23                   | 1.18   | 1.18   | 1.17   |
| 8270.00         | 3.12                | 3.06 | 0.05                     | 34.28          | 1.16                   | 1.14   | 1.14   | 1.12   |
| 8635.00         | 3.16                | 3.11 | 0.05                     | 28.90          | 1.35                   | 1.15   | 1.14   | 1.12   |
| 9000.00         | 2.96                | 2.92 | 0.04                     | 25.96          | 1.51                   | 1.19   | 1.16   | 1.15   |



### electrical schematic

