*Coaxial*

# Power Splitter/Combiner

## ZA4PD-2+

4 Way-0° 50Ω 1000 to 2000 MHz

*N-Type version shown*

CASE STYLE: DD52

| Connectors | Model | Price | Qty. |
|---|---|---|---|
| **SMA** | ZA4PD-2-S+ | $89.95 | (1-9) |
| **N-TYPE** | ZA4PD-2-N+ | $89.95 | (1-9) |

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

*The +Suffix has been added in order to identify 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 | 0.375W max. |

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

### Coaxial Connections

| SUM PORT | S |
|---|---|
| PORT 1 | 1 |
| PORT 2 | 2 |
| PORT 3 | 3 |
| PORT 4 | 4 |

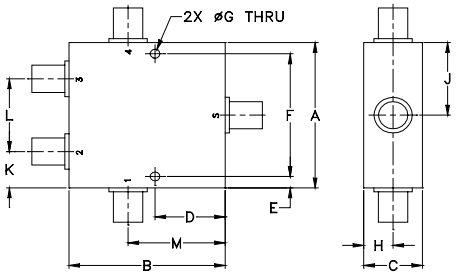
### Features

- wideband, 1000 to 2000 MHz
- good isolation, 25 dB typ.
- up to 10W power input as splitter
- good VSWR, 1.20:1 typ.

### Applications

- GPS
- communication systems

### Outline Drawing




### Outline Dimensions (inch / mm)

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| 2.00 | 2.00 | .75 | .90 | .156 | 1.688 | .125 |
| 50.80 | 50.80 | 19.05 | 22.86 | 3.96 | 42.88 | 3.18 |

| H | J | K | L | M | wt |
|---|---|---|---|---|---|
| .38 | 1.00 | .50 | 1.00 | 1.25 | grams |
| 9.65 | 25.40 | 12.70 | 25.40 | 31.75 | 150.00 |

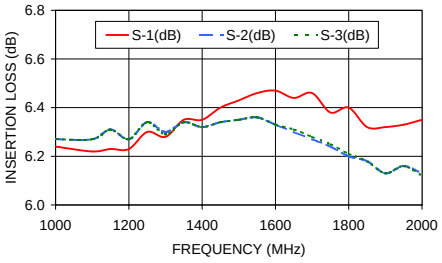
### Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 6.0 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|---|---|---|---|---|---|---|
| $f_L$-$f_U$ | Typ. | Min. | Typ. | Max. | Max. | Max. |
| 1000-2000 | 25 | 16 | 0.3 | 1.0 | 6 | 0.7 |

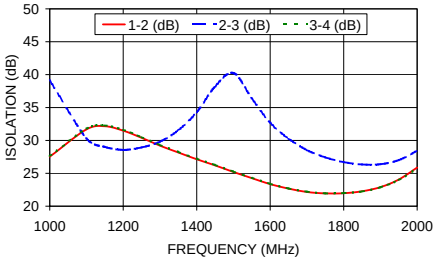
### Typical Performance Data

| Freq. (MHz) | Insertion Loss (dB) | | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 | VSWR 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S-1 | S-2 | S-3 | S-4 | | 1-2 | 2-3 | 3-4 | | | | | | |
| 1000 | 6.24 | 6.27 | 6.27 | 6.25 | 0.03 | 27.53 | 39.12 | 27.62 | 1.90 | 1.56 | 1.21 | 1.29 | 1.29 | 1.20 |
| 1100 | 6.22 | 6.27 | 6.27 | 6.22 | 0.05 | 31.69 | 30.28 | 31.80 | 1.94 | 1.41 | 1.21 | 1.22 | 1.22 | 1.20 |
| 1150 | 6.23 | 6.31 | 6.31 | 6.22 | 0.09 | 32.16 | 29.02 | 32.26 | 1.75 | 1.33 | 1.21 | 1.19 | 1.19 | 1.20 |
| 1200 | 6.23 | 6.27 | 6.27 | 6.23 | 0.04 | 31.48 | 28.57 | 31.60 | 1.87 | 1.26 | 1.21 | 1.16 | 1.16 | 1.20 |
| 1300 | 6.28 | 6.30 | 6.29 | 6.27 | 0.03 | 29.21 | 29.81 | 29.31 | 1.80 | 1.13 | 1.21 | 1.12 | 1.12 | 1.20 |
| 1400 | 6.35 | 6.32 | 6.32 | 6.35 | 0.03 | 27.14 | 34.29 | 27.23 | 1.85 | 1.11 | 1.21 | 1.11 | 1.11 | 1.21 |
| 1450 | 6.40 | 6.34 | 6.34 | 6.40 | 0.06 | 26.20 | 38.20 | 26.28 | 1.94 | 1.16 | 1.21 | 1.11 | 1.11 | 1.21 |
| 1500 | 6.43 | 6.35 | 6.35 | 6.44 | 0.09 | 25.20 | 40.24 | 25.27 | 1.97 | 1.21 | 1.21 | 1.11 | 1.11 | 1.21 |
| 1600 | 6.47 | 6.33 | 6.33 | 6.47 | 0.14 | 23.35 | 32.69 | 23.40 | 2.24 | 1.31 | 1.21 | 1.10 | 1.10 | 1.21 |
| 1700 | 6.46 | 6.27 | 6.28 | 6.46 | 0.19 | 22.16 | 28.53 | 22.21 | 2.63 | 1.39 | 1.21 | 1.06 | 1.07 | 1.21 |
| 1750 | 6.38 | 6.24 | 6.25 | 6.38 | 0.14 | 21.95 | 27.42 | 21.95 | 3.03 | 1.42 | 1.20 | 1.05 | 1.05 | 1.21 |
| 1800 | 6.40 | 6.20 | 6.21 | 6.40 | 0.20 | 21.97 | 26.70 | 22.00 | 3.00 | 1.44 | 1.20 | 1.03 | 1.04 | 1.21 |
| 1900 | 6.32 | 6.13 | 6.13 | 6.31 | 0.19 | 22.90 | 26.38 | 22.87 | 3.10 | 1.44 | 1.18 | 1.09 | 1.08 | 1.19 |
| 1950 | 6.33 | 6.16 | 6.16 | 6.32 | 0.17 | 24.05 | 27.01 | 23.98 | 3.27 | 1.44 | 1.17 | 1.14 | 1.13 | 1.18 |
| 2000 | 6.35 | 6.13 | 6.12 | 6.32 | 0.23 | 25.87 | 28.42 | 25.77 | 3.05 | 1.44 | 1.15 | 1.19 | 1.18 | 1.16 |

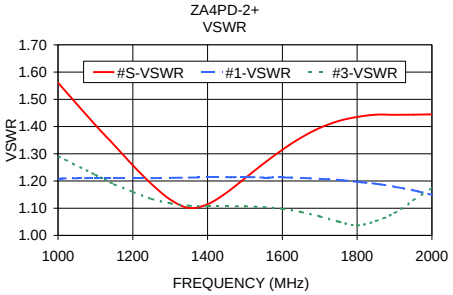
ZA4PD-2+
INSERTION LOSS




ZA4PD-2+
ISOLATION




ZA4PD-2+
VSWR




### electrical schematic




**Notes: 1.** Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.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