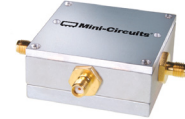


Power Splitter/Combiner

ZA3PD-4+

3 Way-0° 50Ω 2000 to 4200 MHz



SMA version shown
CASE STYLE: CC51

| Connectors | Model |
|------------|------------|
| SMA | ZA3PD-4-S+ |
| N-TYPE | ZA3PD-4-N+ |

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

Maximum Ratings

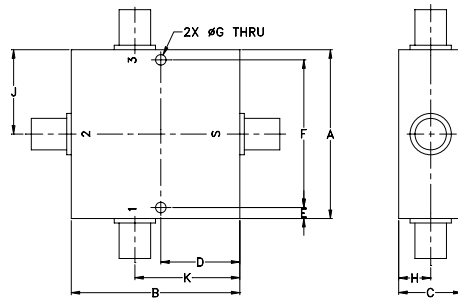
| | |
|-----------------------------|-------------------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 10W max. |
| Internal Dissipation | 0.375W max. |
| DC Current | 900 mA (300 mA for each port) |

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 |

Outline Drawing



Outline Dimensions (inch/mm)

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| A | B | C | D | E | F |
| 2.00 | 2.00 | .75 | .938 | .13 | 1.750 |
| 50.80 | 50.80 | 19.05 | 23.83 | 3.30 | 44.45 |
| G | H | J | K | wt | |
| .125 | .38 | 1.00 | 1.25 | grams | |
| 3.18 | 9.65 | 25.40 | 31.75 | 200.0 | |

Features

- very wideband, 2000 to 4200 MHz
- low insertion loss, 0.7 dB typ.
- up to 10W power input as splitter
- rugged, shielded

Applications

- ISM
- satellite communication
- MMDS
- instrumentation

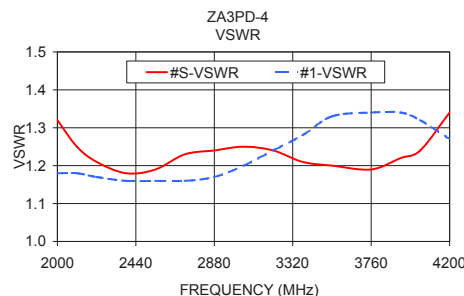
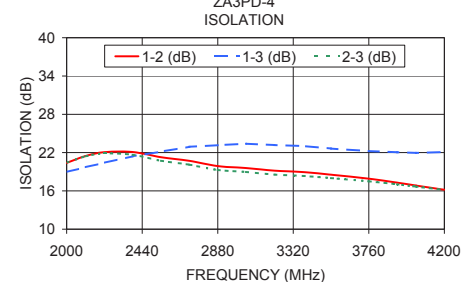
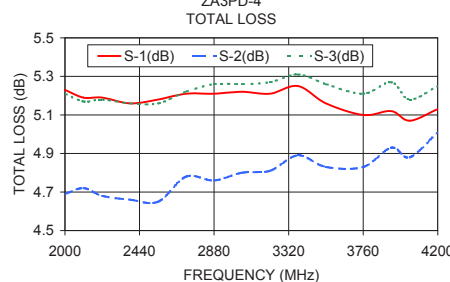
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 4.8 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|------|----------------------------------|------|---------------------------|--------------------------|
| | Typ. | Min. | Typ. | Max. | | |
| f_L - f_U | | | | | Max. | Max. |
| 2000-4200 | 18 | 14 | 0.7 | 1.0 | — | 0.9 |

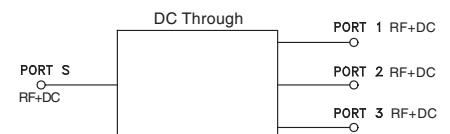
Typical Performance Data

| Freq. (MHz) | Total Loss ¹ (dB) | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 |
|-------------|------------------------------|------|------|------------------|----------------|-------|-------|---------------------|--------|--------|--------|--------|
| | S-1 | S-2 | S-3 | | 1-2 | 1-3 | 2-3 | | | | | |
| 2000.00 | 5.23 | 4.69 | 5.21 | 0.54 | 20.39 | 18.97 | 20.41 | 3.49 | 1.32 | 1.18 | 1.67 | 1.21 |
| 2110.00 | 5.19 | 4.72 | 5.17 | 0.47 | 21.47 | 19.71 | 21.42 | 3.81 | 1.25 | 1.18 | 1.64 | 1.20 |
| 2220.00 | 5.19 | 4.68 | 5.18 | 0.50 | 22.07 | 20.40 | 21.86 | 4.23 | 1.21 | 1.17 | 1.60 | 1.20 |
| 2385.00 | 5.16 | 4.66 | 5.16 | 0.50 | 22.09 | 21.43 | 21.66 | 3.68 | 1.18 | 1.16 | 1.54 | 1.18 |
| 2550.00 | 5.18 | 4.65 | 5.16 | 0.53 | 21.28 | 22.15 | 20.72 | 4.52 | 1.19 | 1.16 | 1.49 | 1.16 |
| 2715.00 | 5.21 | 4.78 | 5.22 | 0.44 | 20.71 | 22.92 | 20.11 | 3.95 | 1.23 | 1.16 | 1.44 | 1.15 |
| 2880.00 | 5.21 | 4.76 | 5.26 | 0.50 | 19.89 | 23.16 | 19.29 | 4.03 | 1.24 | 1.17 | 1.40 | 1.16 |
| 3045.00 | 5.22 | 4.80 | 5.26 | 0.47 | 19.58 | 23.39 | 18.97 | 3.95 | 1.25 | 1.20 | 1.37 | 1.18 |
| 3210.00 | 5.21 | 4.81 | 5.27 | 0.46 | 19.17 | 23.19 | 18.56 | 3.82 | 1.24 | 1.24 | 1.34 | 1.20 |
| 3375.00 | 5.25 | 4.89 | 5.31 | 0.43 | 18.95 | 23.03 | 18.35 | 3.97 | 1.21 | 1.28 | 1.33 | 1.22 |
| 3540.00 | 5.16 | 4.83 | 5.26 | 0.43 | 18.54 | 22.64 | 18.00 | 3.78 | 1.20 | 1.33 | 1.32 | 1.25 |
| 3760.00 | 5.10 | 4.83 | 5.21 | 0.38 | 17.91 | 22.24 | 17.50 | 3.99 | 1.19 | 1.34 | 1.29 | 1.24 |
| 3925.00 | 5.12 | 4.93 | 5.27 | 0.34 | 17.30 | 22.06 | 17.03 | 3.71 | 1.22 | 1.34 | 1.27 | 1.21 |
| 4035.00 | 5.07 | 4.88 | 5.18 | 0.30 | 16.83 | 21.96 | 16.67 | 3.68 | 1.24 | 1.32 | 1.25 | 1.18 |
| 4200.00 | 5.13 | 5.01 | 5.25 | 0.24 | 16.18 | 22.10 | 16.17 | 3.58 | 1.34 | 1.27 | 1.21 | 1.13 |

1. Total Loss = Insertion Loss + 4.8dB splitter loss.



electrical schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document 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/WCLStore/terms.jsp

