*DC Pass*

# Power Splitter/Combiner

## ZN4PD1-63-S+

4 Way-0° 50Ω 2000 to 6000 MHz

*Generic photo used for illustration purposes only*

CASE STYLE: UU846

| Connectors | Model |
|---|---|
| **SMA** | ZN4PD1-63-S+ |

*+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 | 1W max. |
| DC Current | 1.0 A (250mA for each port) |

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

### Coaxial Connections

| | |
|---|---|
| SUM PORT | 3 |
| PORT 1 | 1 |
| PORT 2 | 2 |
| PORT 3 | 4 |
| PORT 4 | 5 |

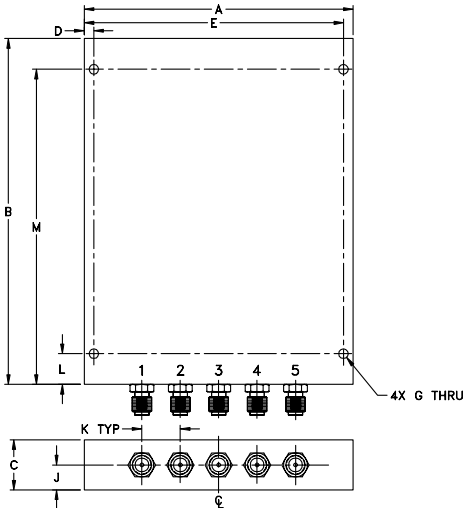
### Features

- wide frequency band, 2000 to 6000 MHz
- low insertion loss, 0.7 dB typ.
- low amplitude unbalance 0.1 dB typ.
- low phase unbalance 1.0 deg. typ.

### Applications

- high band PCS
- UNII
- ISM 802.11A

### Outline Drawing




### Outline Dimensions (inch / mm)

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| 3.50 | 4.50 | .65 | .125 | 3.375 | -- | .125 |
| 88.90 | 114.30 | 16.51 | 3.18 | 85.73 | -- | 3.18 |

| H | J | K | L | M | wt |
|---|---|---|---|---|---|
| -- | .33 | .50 | .400 | 4.100 | grams |
| -- | 8.38 | 12.70 | 10.16 | 104.14 | 288 |

### Electrical Specifications

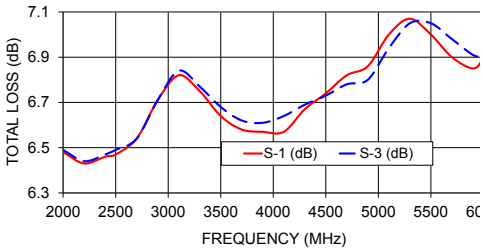
| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 6.0 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) | VSWR (:1) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | S | OUT |
| $f_L$-$f_U$ | Typ. | Min. | Typ. | Max. | Max. | Max. | Typ. | Typ. |
| 2000-6000 | 26 | 17 | 0.7 | 1.3 | 5 | 0.4 | 1.20 | 1.15 |

### Typical Performance Data

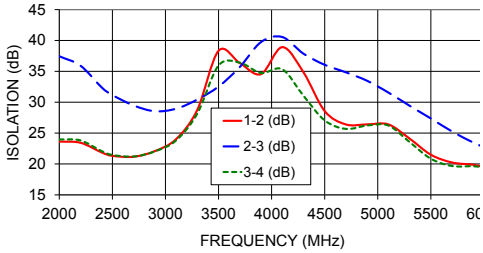
| Freq. (MHz) | Total Loss[1] (dB) | | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 | VSWR 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S-1 | S-2 | S-3 | S-4 | | 1-2 | 2-3 | 3-4 | | | | | | |
| 2000.00 | 6.48 | 6.48 | 6.49 | 6.45 | 0.03 | 23.63 | 37.44 | 23.98 | 0.64 | 1.29 | 1.25 | 1.25 | 1.24 | 1.25 |
| 2200.00 | 6.43 | 6.43 | 6.44 | 6.39 | 0.05 | 23.43 | 35.91 | 23.81 | 0.59 | 1.05 | 1.17 | 1.18 | 1.17 | 1.16 |
| 2400.00 | 6.46 | 6.46 | 6.47 | 6.42 | 0.05 | 21.86 | 32.38 | 22.07 | 0.66 | 1.11 | 1.12 | 1.14 | 1.13 | 1.12 |
| 2700.00 | 6.54 | 6.53 | 6.54 | 6.48 | 0.06 | 21.17 | 29.48 | 21.21 | 0.71 | 1.14 | 1.20 | 1.21 | 1.19 | 1.18 |
| 2900.00 | 6.71 | 6.70 | 6.71 | 6.65 | 0.06 | 22.08 | 28.54 | 22.04 | 0.70 | 1.15 | 1.24 | 1.24 | 1.23 | 1.21 |
| 3300.00 | 6.75 | 6.75 | 6.77 | 6.68 | 0.08 | 28.77 | 30.43 | 28.16 | 1.10 | 1.23 | 1.25 | 1.23 | 1.23 | 1.20 |
| 3700.00 | 6.58 | 6.62 | 6.62 | 6.52 | 0.10 | 36.35 | 35.69 | 36.41 | 1.66 | 1.07 | 1.10 | 1.10 | 1.09 | 1.09 |
| 4100.00 | 6.57 | 6.62 | 6.64 | 6.52 | 0.12 | 38.92 | 40.56 | 35.34 | 1.54 | 1.04 | 1.02 | 1.01 | 1.03 | 1.04 |
| 4500.00 | 6.74 | 6.72 | 6.73 | 6.67 | 0.07 | 28.57 | 36.06 | 27.06 | 1.34 | 1.19 | 1.06 | 1.06 | 1.05 | 1.09 |
| 4900.00 | 6.86 | 6.80 | 6.80 | 6.78 | 0.09 | 26.41 | 33.47 | 26.23 | 1.71 | 1.18 | 1.11 | 1.13 | 1.12 | 1.12 |
| 5300.00 | 7.07 | 7.04 | 7.05 | 6.96 | 0.11 | 24.11 | 29.43 | 23.55 | 1.54 | 1.21 | 1.11 | 1.11 | 1.11 | 1.08 |
| 5500.00 | 7.00 | 7.05 | 7.05 | 6.88 | 0.17 | 21.50 | 27.37 | 20.85 | 1.58 | 1.28 | 1.12 | 1.12 | 1.14 | 1.09 |
| 5700.00 | 6.90 | 6.98 | 6.98 | 6.76 | 0.21 | 20.24 | 25.26 | 19.67 | 1.68 | 1.30 | 1.16 | 1.16 | 1.19 | 1.13 |
| 5900.00 | 6.85 | 6.91 | 6.91 | 6.72 | 0.19 | 19.87 | 23.47 | 19.64 | 1.36 | 1.25 | 1.19 | 1.17 | 1.21 | 1.18 |
| 6000.00 | 6.89 | 6.92 | 6.90 | 6.74 | 0.18 | 19.46 | 22.75 | 19.42 | 1.20 | 1.20 | 1.20 | 1.17 | 1.21 | 1.20 |

1. Total Loss = Insertion Loss + 6dB splitter loss.

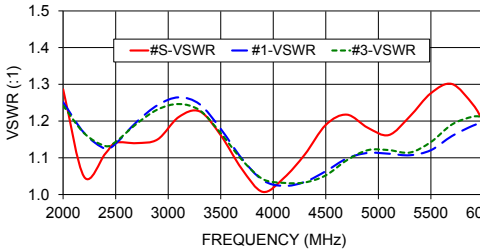
ZN4PD1-63-S+
TOTAL LOSS



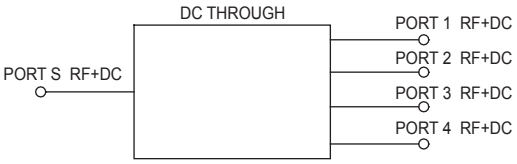

ZN4PD1-63-S+
ISOLATION




ZN4PD1-63-S+
VSWR




### Electrical Schematic




Notes

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. 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/MCLStore/terms.jsp

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View ZN4PD1-63-S+ on WIN SOURCE
- Mini-Circuits Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management