*DC Pass*

# Power Splitter/Combiner

## ZN2PD1-63+

2 Way-0° 50Ω 0.5 to 6 GHz



*Generic photo used for illustration purposes only*

CASE STYLE: VVV2609

| Connectors | Model |
|---|---|
| **N-Female** | ZN2PD1-63-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 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 30W max. |
| Power Input (as a combiner) | 0.5W/port max. |
| DC Current | 1.2A/port max. |

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

### Coaxial Connections

| | |
|---|---|
| SUM PORT | S |
| PORT 1 | 1 |
| PORT 2 | 2 |

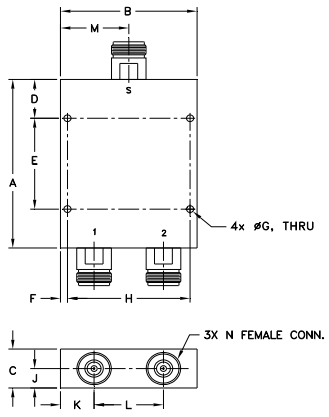
### Features

- wideband, 0.5 to 6 GHz
- excellent amplitude unbalance, 0.1 dB typ.
- low insertion los, 0.45 dB typ.
- up to 30W power input as splitter

### Applications

- ISM
- test and measurement
- Lab

### Outline Drawing

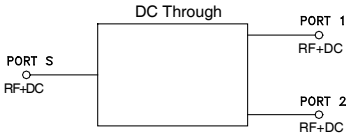



### Outline Dimensions (inch / mm)

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| 3.25 | 2.46 | .75 | .75 | 1.750 | .11 | .129 |
| 82.55 | 62.48 | 19.05 | 19.05 | 44.45 | 2.79 | 3.28 |

| H | J | K | L | M | wt |
|---|---|---|---|---|---|
| 2.250 | .38 | .61 | 1.250 | 1.23 | grams |
| 57.15 | 9.65 | 15.49 | 31.75 | 31.24 | 280 |

### Electrical Schematic



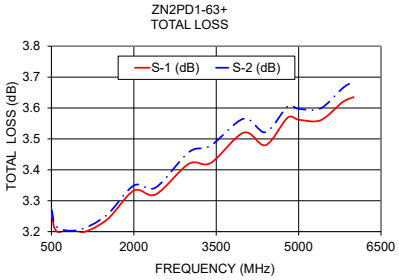

### Electrical Specifications

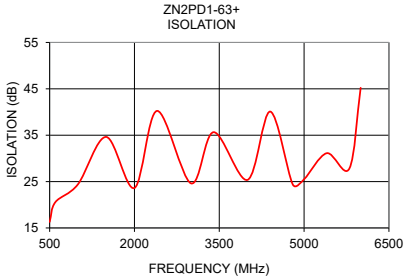
| Parameter | Frequency (GHz) | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Frequency Range | | 0.5 | | 6 | GHz |
| Insertion Loss (above 3.0 dB) | 0.5 - 6 | — | 0.45 | 0.9 | dB |
| Isolation | 0.5 - 0.6 | 14 | 18 | — | dB |
| | 0.6 - 6 | 18 | 22 | — | |
| Phase Unbalance | 0.5 - 6 | — | 1.5 | 3.0 | Degree |
| Amplitude Unbalance | 0.5 - 6 | — | 0.1 | 0.3 | dB |
| VSWR (Port S) | 0.5 - 0.6 | — | 1.45 | 1.6 | :1 |
| | 0.6 - 6 | — | 1.3 | 1.45 | |
| VSWR (Port 1-2) | 0.5 - 6 | — | 1.2 | 1.25 | :1 |

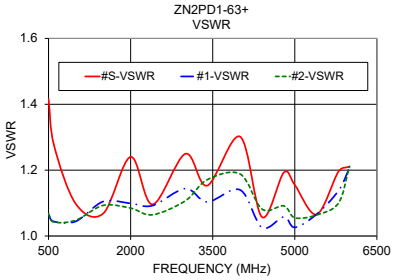
### Typical Performance Data

| Frequency (MHz) | Total Loss[1] (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|---|---|---|---|---|---|---|---|---|
| | S-1 | S-2 | | | | | | |
| 500 | 3.26 | 3.27 | 0.02 | 16.30 | 0.01 | 1.42 | 1.06 | 1.07 |
| 600 | 3.20 | 3.21 | 0.01 | 20.55 | 0.02 | 1.28 | 1.04 | 1.04 |
| 1000 | 3.19 | 3.21 | 0.01 | 24.40 | 0.04 | 1.10 | 1.04 | 1.05 |
| 1500 | 3.24 | 3.25 | 0.02 | 34.63 | 0.09 | 1.07 | 1.10 | 1.09 |
| 2000 | 3.33 | 3.35 | 0.02 | 23.62 | 0.11 | 1.24 | 1.10 | 1.08 |
| 2400 | 3.32 | 3.34 | 0.02 | 40.24 | 0.10 | 1.10 | 1.09 | 1.06 |
| 3000 | 3.42 | 3.46 | 0.04 | 24.61 | 0.12 | 1.25 | 1.14 | 1.11 |
| 3400 | 3.42 | 3.48 | 0.06 | 35.65 | 0.22 | 1.15 | 1.10 | 1.17 |
| 4000 | 3.52 | 3.57 | 0.05 | 25.36 | 0.36 | 1.30 | 1.14 | 1.19 |
| 4400 | 3.48 | 3.52 | 0.04 | 40.10 | 0.42 | 1.06 | 1.03 | 1.08 |
| 4800 | 3.57 | 3.61 | 0.04 | 24.36 | 0.48 | 1.19 | 1.06 | 1.09 |
| 5000 | 3.56 | 3.60 | 0.04 | 25.51 | 0.50 | 1.16 | 1.03 | 1.06 |
| 5400 | 3.56 | 3.60 | 0.04 | 31.12 | 0.52 | 1.07 | 1.07 | 1.06 |
| 5800 | 3.62 | 3.66 | 0.05 | 27.80 | 0.55 | 1.20 | 1.14 | 1.10 |
| 6000 | 3.64 | 3.69 | 0.05 | 45.22 | 0.59 | 1.21 | 1.21 | 1.21 |

1. Total Loss = Insertion Loss + 3dB splitter loss.




**Notes**
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