

2 Way-0° Power Splitter/Combiner

ZN2PD-83W-N+

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0 dBm @ Temperature = +25°C

| FREQUENCY (MHz) | TOTAL LOSS ¹ (dB) | | AMPLITUDE UNBALANCE (dB) | ISOLATION (dB) 1-2 | PHASE UNBALANCE (Deg) | FREQUENCY (MHz) | VSWR (:1) | | |
|--------------------|---------------------------------|------|--------------------------------|--------------------------|-----------------------------|--------------------|--------------|------|------|
| | S-1 | S-2 | | | | | S | 1 | 2 |
| 500 | 3.21 | 3.20 | 0.01 | 14.65 | 0.04 | 500 | 1.35 | 1.10 | 1.10 |
| 600 | 3.15 | 3.14 | 0.02 | 18.34 | 0.04 | 600 | 1.19 | 1.08 | 1.09 |
| 700 | 3.14 | 3.12 | 0.02 | 23.70 | 0.10 | 700 | 1.05 | 1.10 | 1.10 |
| 800 | 3.15 | 3.14 | 0.02 | 33.19 | 0.17 | 800 | 1.06 | 1.12 | 1.12 |
| 900 | 3.18 | 3.17 | 0.01 | 35.27 | 0.18 | 900 | 1.16 | 1.13 | 1.14 |
| 1000 | 3.21 | 3.20 | 0.00 | 29.33 | 0.14 | 1000 | 1.23 | 1.15 | 1.15 |
| 1200 | 3.24 | 3.22 | 0.02 | 29.33 | 0.17 | 1200 | 1.25 | 1.16 | 1.16 |
| 1400 | 3.21 | 3.21 | 0.01 | 34.50 | 0.27 | 1400 | 1.16 | 1.15 | 1.15 |
| 1600 | 3.23 | 3.22 | 0.01 | 25.86 | 0.24 | 1600 | 1.14 | 1.15 | 1.14 |
| 1800 | 3.26 | 3.25 | 0.01 | 22.52 | 0.29 | 1800 | 1.20 | 1.17 | 1.17 |
| 2000 | 3.28 | 3.27 | 0.01 | 21.51 | 0.33 | 2000 | 1.20 | 1.18 | 1.17 |
| 2200 | 3.29 | 3.28 | 0.01 | 20.19 | 0.35 | 2200 | 1.19 | 1.13 | 1.12 |
| 2400 | 3.33 | 3.32 | 0.01 | 18.89 | 0.41 | 2400 | 1.24 | 1.10 | 1.09 |
| 2600 | 3.32 | 3.32 | 0.00 | 19.28 | 0.47 | 2600 | 1.20 | 1.09 | 1.08 |
| 2800 | 3.30 | 3.30 | 0.01 | 20.13 | 0.46 | 2800 | 1.12 | 1.09 | 1.08 |
| 3000 | 3.35 | 3.36 | 0.01 | 18.66 | 0.48 | 3000 | 1.21 | 1.11 | 1.10 |
| 3200 | 3.37 | 3.38 | 0.01 | 17.38 | 0.49 | 3200 | 1.25 | 1.09 | 1.09 |
| 3400 | 3.33 | 3.35 | 0.01 | 18.44 | 0.52 | 3400 | 1.14 | 1.12 | 1.12 |
| 3600 | 3.34 | 3.36 | 0.03 | 21.36 | 0.55 | 3600 | 1.05 | 1.21 | 1.21 |
| 3800 | 3.36 | 3.38 | 0.02 | 20.68 | 0.50 | 3800 | 1.15 | 1.21 | 1.22 |
| 4000 | 3.37 | 3.40 | 0.03 | 19.12 | 0.62 | 4000 | 1.15 | 1.12 | 1.12 |
| 4200 | 3.35 | 3.39 | 0.03 | 20.60 | 0.51 | 4200 | 1.09 | 1.11 | 1.12 |
| 4400 | 3.39 | 3.40 | 0.01 | 25.81 | 0.65 | 4400 | 1.05 | 1.15 | 1.16 |
| 4600 | 3.37 | 3.41 | 0.04 | 24.40 | 0.69 | 4600 | 1.05 | 1.08 | 1.08 |
| 4800 | 3.41 | 3.44 | 0.03 | 21.60 | 0.65 | 4800 | 1.15 | 1.05 | 1.06 |
| 5000 | 3.44 | 3.48 | 0.04 | 23.18 | 0.82 | 5000 | 1.19 | 1.15 | 1.16 |
| 5200 | 3.42 | 3.47 | 0.05 | 28.60 | 0.72 | 5200 | 1.13 | 1.13 | 1.14 |
| 5400 | 3.43 | 3.47 | 0.04 | 23.86 | 0.72 | 5400 | 1.13 | 1.07 | 1.08 |
| 5600 | 3.48 | 3.54 | 0.06 | 21.41 | 0.88 | 5600 | 1.23 | 1.14 | 1.14 |
| 5800 | 3.51 | 3.56 | 0.05 | 22.36 | 0.74 | 5800 | 1.24 | 1.16 | 1.15 |
| 6000 | 3.49 | 3.53 | 0.04 | 24.18 | 0.86 | 6000 | 1.22 | 1.09 | 1.09 |
| 6200 | 3.47 | 3.53 | 0.06 | 22.13 | 0.86 | 6200 | 1.19 | 1.03 | 1.03 |
| 6400 | 3.54 | 3.59 | 0.06 | 19.81 | 0.91 | 6400 | 1.21 | 1.04 | 1.03 |
| 6600 | 3.54 | 3.61 | 0.08 | 19.41 | 0.93 | 6600 | 1.27 | 1.02 | 1.01 |
| 6800 | 3.53 | 3.61 | 0.08 | 20.05 | 0.88 | 6800 | 1.26 | 1.05 | 1.06 |
| 7000 | 3.51 | 3.59 | 0.09 | 21.19 | 0.95 | 7000 | 1.13 | 1.11 | 1.12 |
| 7200 | 3.53 | 3.63 | 0.10 | 20.76 | 0.83 | 7200 | 1.16 | 1.16 | 1.16 |
| 7400 | 3.58 | 3.66 | 0.08 | 19.34 | 0.87 | 7400 | 1.29 | 1.15 | 1.13 |
| 7600 | 3.57 | 3.66 | 0.09 | 19.30 | 0.97 | 7600 | 1.25 | 1.10 | 1.09 |
| 7800 | 3.52 | 3.61 | 0.10 | 21.17 | 0.93 | 7800 | 1.06 | 1.13 | 1.12 |
| 8000 | 3.54 | 3.64 | 0.10 | 24.87 | 1.08 | 8000 | 1.15 | 1.20 | 1.17 |
| 8100 | 3.55 | 3.68 | 0.13 | 24.56 | 1.07 | 8100 | 1.22 | 1.20 | 1.18 |
| 8300 | 3.56 | 3.69 | 0.13 | 20.89 | 1.07 | 8300 | 1.24 | 1.13 | 1.11 |
| 8500 | 3.52 | 3.68 | 0.16 | 19.97 | 1.16 | 8500 | 1.18 | 1.02 | 1.01 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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REV. OR
 ZN2PD-83W-N+
 9/24/2019

2 Way-0° Power Splitter/Combiner

ZN2PD-83W-N+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -55°C

| FREQUENCY (MHz) | TOTAL LOSS ¹ (dB) | | AMPLITUDE UNBALANCE (dB) | ISOLATION (dB) 1-2 | PHASE UNBALANCE (Deg) | FREQUENCY (MHz) | VSWR (:1) | | |
|--------------------|---------------------------------|------|--------------------------------|--------------------------|-----------------------------|--------------------|--------------|------|------|
| | S-1 | S-2 | | | | | S | 1 | 2 |
| 500 | 3.20 | 3.19 | 0.01 | 14.64 | 0.00 | 500 | 1.35 | 1.10 | 1.10 |
| 600 | 3.14 | 3.12 | 0.02 | 18.33 | 0.01 | 600 | 1.19 | 1.08 | 1.09 |
| 700 | 3.12 | 3.10 | 0.02 | 23.72 | 0.04 | 700 | 1.05 | 1.10 | 1.10 |
| 800 | 3.14 | 3.12 | 0.02 | 33.58 | 0.10 | 800 | 1.06 | 1.12 | 1.12 |
| 900 | 3.16 | 3.15 | 0.01 | 35.30 | 0.11 | 900 | 1.16 | 1.13 | 1.14 |
| 1000 | 3.19 | 3.18 | 0.01 | 29.20 | 0.06 | 1000 | 1.23 | 1.14 | 1.15 |
| 1200 | 3.21 | 3.19 | 0.02 | 29.34 | 0.08 | 1200 | 1.25 | 1.15 | 1.16 |
| 1400 | 3.19 | 3.18 | 0.01 | 34.45 | 0.16 | 1400 | 1.16 | 1.15 | 1.15 |
| 1600 | 3.20 | 3.19 | 0.01 | 25.85 | 0.12 | 1600 | 1.14 | 1.15 | 1.14 |
| 1800 | 3.24 | 3.22 | 0.02 | 22.49 | 0.16 | 1800 | 1.21 | 1.18 | 1.17 |
| 2000 | 3.25 | 3.23 | 0.02 | 21.47 | 0.20 | 2000 | 1.20 | 1.18 | 1.17 |
| 2200 | 3.26 | 3.24 | 0.01 | 20.17 | 0.21 | 2200 | 1.19 | 1.13 | 1.12 |
| 2400 | 3.30 | 3.28 | 0.02 | 18.89 | 0.26 | 2400 | 1.24 | 1.11 | 1.09 |
| 2600 | 3.28 | 3.28 | 0.00 | 19.28 | 0.31 | 2600 | 1.20 | 1.09 | 1.08 |
| 2800 | 3.26 | 3.26 | 0.00 | 20.09 | 0.27 | 2800 | 1.12 | 1.08 | 1.08 |
| 3000 | 3.31 | 3.31 | 0.00 | 18.69 | 0.26 | 3000 | 1.21 | 1.11 | 1.11 |
| 3200 | 3.33 | 3.33 | 0.00 | 17.40 | 0.26 | 3200 | 1.25 | 1.10 | 1.09 |
| 3400 | 3.30 | 3.30 | 0.00 | 18.38 | 0.28 | 3400 | 1.14 | 1.12 | 1.12 |
| 3600 | 3.30 | 3.31 | 0.01 | 21.45 | 0.31 | 3600 | 1.05 | 1.22 | 1.21 |
| 3800 | 3.33 | 3.33 | 0.00 | 20.67 | 0.27 | 3800 | 1.15 | 1.22 | 1.22 |
| 4000 | 3.34 | 3.34 | 0.01 | 19.04 | 0.39 | 4000 | 1.14 | 1.12 | 1.12 |
| 4200 | 3.32 | 3.33 | 0.01 | 20.67 | 0.28 | 4200 | 1.09 | 1.13 | 1.13 |
| 4400 | 3.35 | 3.34 | 0.00 | 25.95 | 0.42 | 4400 | 1.05 | 1.16 | 1.16 |
| 4600 | 3.33 | 3.35 | 0.02 | 24.29 | 0.44 | 4600 | 1.04 | 1.08 | 1.08 |
| 4800 | 3.37 | 3.38 | 0.01 | 21.54 | 0.39 | 4800 | 1.15 | 1.06 | 1.07 |
| 5000 | 3.40 | 3.42 | 0.02 | 23.29 | 0.55 | 5000 | 1.20 | 1.17 | 1.16 |
| 5200 | 3.38 | 3.41 | 0.03 | 28.70 | 0.44 | 5200 | 1.13 | 1.14 | 1.14 |
| 5400 | 3.39 | 3.41 | 0.02 | 23.62 | 0.41 | 5400 | 1.15 | 1.08 | 1.08 |
| 5600 | 3.44 | 3.48 | 0.03 | 21.43 | 0.55 | 5600 | 1.24 | 1.16 | 1.14 |
| 5800 | 3.47 | 3.50 | 0.03 | 22.47 | 0.39 | 5800 | 1.25 | 1.17 | 1.15 |
| 6000 | 3.44 | 3.46 | 0.02 | 24.14 | 0.47 | 6000 | 1.22 | 1.08 | 1.08 |
| 6200 | 3.43 | 3.47 | 0.04 | 21.92 | 0.45 | 6200 | 1.20 | 1.04 | 1.03 |
| 6400 | 3.50 | 3.52 | 0.02 | 19.86 | 0.46 | 6400 | 1.22 | 1.05 | 1.03 |
| 6600 | 3.50 | 3.53 | 0.03 | 19.65 | 0.46 | 6600 | 1.26 | 1.04 | 1.02 |
| 6800 | 3.50 | 3.53 | 0.03 | 19.95 | 0.42 | 6800 | 1.25 | 1.07 | 1.07 |
| 7000 | 3.48 | 3.51 | 0.03 | 20.97 | 0.51 | 7000 | 1.13 | 1.12 | 1.12 |
| 7200 | 3.50 | 3.54 | 0.04 | 21.05 | 0.42 | 7200 | 1.14 | 1.18 | 1.17 |
| 7400 | 3.55 | 3.57 | 0.02 | 19.51 | 0.47 | 7400 | 1.28 | 1.17 | 1.14 |
| 7600 | 3.54 | 3.58 | 0.03 | 19.14 | 0.58 | 7600 | 1.24 | 1.11 | 1.09 |
| 7800 | 3.50 | 3.53 | 0.03 | 20.97 | 0.52 | 7800 | 1.08 | 1.14 | 1.12 |
| 8000 | 3.52 | 3.56 | 0.03 | 25.52 | 0.64 | 8000 | 1.14 | 1.21 | 1.18 |
| 8100 | 3.54 | 3.60 | 0.06 | 24.91 | 0.64 | 8100 | 1.21 | 1.20 | 1.18 |
| 8300 | 3.56 | 3.61 | 0.05 | 20.67 | 0.60 | 8300 | 1.25 | 1.11 | 1.10 |
| 8500 | 3.54 | 3.60 | 0.06 | 19.78 | 0.70 | 8500 | 1.21 | 1.02 | 1.02 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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2 Way-0° Power Splitter/Combiner

ZN2PD-83W-N+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +100°C

| FREQUENCY (MHz) | TOTAL LOSS ¹ (dB) | | AMPLITUDE UNBALANCE (dB) | ISOLATION (dB) 1-2 | PHASE UNBALANCE (Deg) | FREQUENCY (MHz) | VSWR (:1) | | |
|--------------------|---------------------------------|------|--------------------------------|--------------------------|-----------------------------|--------------------|--------------|------|------|
| | S-1 | S-2 | | | | | S | 1 | 2 |
| 500 | 3.23 | 3.22 | 0.01 | 14.7 | 0.06 | 500 | 1.35 | 1.10 | 1.10 |
| 600 | 3.17 | 3.16 | 0.02 | 18.4 | 0.07 | 600 | 1.19 | 1.08 | 1.09 |
| 700 | 3.16 | 3.14 | 0.02 | 23.8 | 0.14 | 700 | 1.05 | 1.10 | 1.10 |
| 800 | 3.18 | 3.16 | 0.02 | 33.0 | 0.21 | 800 | 1.06 | 1.12 | 1.12 |
| 900 | 3.21 | 3.20 | 0.01 | 35.4 | 0.23 | 900 | 1.16 | 1.13 | 1.14 |
| 1000 | 3.23 | 3.23 | 0.01 | 29.6 | 0.19 | 1000 | 1.23 | 1.15 | 1.16 |
| 1200 | 3.27 | 3.25 | 0.02 | 29.5 | 0.24 | 1200 | 1.25 | 1.16 | 1.16 |
| 1400 | 3.25 | 3.24 | 0.01 | 34.4 | 0.35 | 1400 | 1.16 | 1.15 | 1.15 |
| 1600 | 3.26 | 3.25 | 0.01 | 26.0 | 0.33 | 1600 | 1.13 | 1.14 | 1.14 |
| 1800 | 3.30 | 3.29 | 0.01 | 22.5 | 0.40 | 1800 | 1.20 | 1.17 | 1.16 |
| 2000 | 3.32 | 3.31 | 0.01 | 21.5 | 0.46 | 2000 | 1.19 | 1.18 | 1.17 |
| 2200 | 3.32 | 3.32 | 0.01 | 20.3 | 0.48 | 2200 | 1.18 | 1.13 | 1.13 |
| 2400 | 3.37 | 3.36 | 0.01 | 18.9 | 0.53 | 2400 | 1.24 | 1.10 | 1.10 |
| 2600 | 3.37 | 3.37 | 0.00 | 19.3 | 0.60 | 2600 | 1.20 | 1.09 | 1.08 |
| 2800 | 3.35 | 3.35 | 0.00 | 20.1 | 0.59 | 2800 | 1.12 | 1.08 | 1.07 |
| 3000 | 3.40 | 3.40 | 0.00 | 18.8 | 0.61 | 3000 | 1.20 | 1.11 | 1.09 |
| 3200 | 3.42 | 3.43 | 0.00 | 17.5 | 0.65 | 3200 | 1.25 | 1.10 | 1.09 |
| 3400 | 3.40 | 3.40 | 0.01 | 18.3 | 0.72 | 3400 | 1.15 | 1.12 | 1.11 |
| 3600 | 3.40 | 3.41 | 0.02 | 21.2 | 0.75 | 3600 | 1.04 | 1.20 | 1.20 |
| 3800 | 3.42 | 3.44 | 0.01 | 21.0 | 0.73 | 3800 | 1.15 | 1.21 | 1.22 |
| 4000 | 3.44 | 3.46 | 0.02 | 19.3 | 0.86 | 4000 | 1.15 | 1.13 | 1.13 |
| 4200 | 3.42 | 3.45 | 0.03 | 20.4 | 0.75 | 4200 | 1.09 | 1.10 | 1.11 |
| 4400 | 3.45 | 3.46 | 0.01 | 25.3 | 0.91 | 4400 | 1.05 | 1.15 | 1.15 |
| 4600 | 3.44 | 3.48 | 0.04 | 25.4 | 0.96 | 4600 | 1.05 | 1.09 | 1.10 |
| 4800 | 3.48 | 3.50 | 0.02 | 21.5 | 0.93 | 4800 | 1.15 | 1.04 | 1.04 |
| 5000 | 3.52 | 3.55 | 0.03 | 22.5 | 1.13 | 5000 | 1.21 | 1.15 | 1.15 |
| 5200 | 3.49 | 3.54 | 0.04 | 29.3 | 1.04 | 5200 | 1.13 | 1.13 | 1.14 |
| 5400 | 3.49 | 3.53 | 0.03 | 24.2 | 1.05 | 5400 | 1.10 | 1.05 | 1.06 |
| 5600 | 3.55 | 3.60 | 0.05 | 21.1 | 1.23 | 5600 | 1.22 | 1.13 | 1.13 |
| 5800 | 3.59 | 3.64 | 0.04 | 22.1 | 1.11 | 5800 | 1.25 | 1.17 | 1.15 |
| 6000 | 3.56 | 3.60 | 0.04 | 24.9 | 1.24 | 6000 | 1.19 | 1.10 | 1.10 |
| 6200 | 3.54 | 3.60 | 0.06 | 22.2 | 1.25 | 6200 | 1.17 | 1.03 | 1.02 |
| 6400 | 3.62 | 3.67 | 0.05 | 19.6 | 1.30 | 6400 | 1.22 | 1.05 | 1.03 |
| 6600 | 3.62 | 3.70 | 0.07 | 19.4 | 1.33 | 6600 | 1.26 | 1.02 | 1.01 |
| 6800 | 3.62 | 3.69 | 0.07 | 20.2 | 1.28 | 6800 | 1.26 | 1.04 | 1.04 |
| 7000 | 3.59 | 3.68 | 0.08 | 21.5 | 1.37 | 7000 | 1.14 | 1.10 | 1.11 |
| 7200 | 3.63 | 3.72 | 0.09 | 20.8 | 1.27 | 7200 | 1.17 | 1.16 | 1.15 |
| 7400 | 3.69 | 3.76 | 0.07 | 19.2 | 1.32 | 7400 | 1.31 | 1.14 | 1.12 |
| 7600 | 3.66 | 3.75 | 0.09 | 19.4 | 1.44 | 7600 | 1.26 | 1.10 | 1.09 |
| 7800 | 3.61 | 3.70 | 0.09 | 21.6 | 1.42 | 7800 | 1.05 | 1.14 | 1.13 |
| 8000 | 3.64 | 3.74 | 0.09 | 25.0 | 1.57 | 8000 | 1.17 | 1.21 | 1.18 |
| 8100 | 3.66 | 3.78 | 0.12 | 24.1 | 1.58 | 8100 | 1.24 | 1.21 | 1.18 |
| 8300 | 3.66 | 3.78 | 0.12 | 20.9 | 1.59 | 8300 | 1.24 | 1.13 | 1.11 |
| 8500 | 3.61 | 3.76 | 0.15 | 20.3 | 1.69 | 8500 | 1.17 | 1.03 | 1.02 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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