

2 Way-90° Power Splitter/Combiner

HPQ-05+

Typical Performance Data

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

| FREQ. (MHz) | TOTAL LOSS ¹ (dB) | | AMP. UNBAL. (dB) | PHASE UNBAL. From 90° (deg.) | ISOLATION (dB) 1-2 | VSWR (:1) | | |
|----------------|---------------------------------|------|------------------------|------------------------------------|--------------------------|--------------|------|------|
| | S-1 | S-2 | | | | S | 1 | 2 |
| 200 | 0.97 | 7.70 | 6.73 | 0.36 | 35.51 | 1.05 | 1.05 | 1.06 |
| 250 | 1.39 | 6.20 | 4.81 | 0.28 | 33.31 | 1.06 | 1.06 | 1.07 |
| 300 | 1.86 | 5.09 | 3.23 | 0.17 | 31.76 | 1.07 | 1.07 | 1.09 |
| 350 | 2.34 | 4.26 | 1.92 | 0.09 | 30.29 | 1.08 | 1.08 | 1.10 |
| 360 | 2.45 | 4.11 | 1.66 | 0.05 | 29.99 | 1.08 | 1.08 | 1.10 |
| 370 | 2.55 | 3.98 | 1.43 | 0.04 | 29.68 | 1.08 | 1.08 | 1.10 |
| 380 | 2.64 | 3.85 | 1.21 | 0.01 | 29.42 | 1.09 | 1.09 | 1.11 |
| 390 | 2.74 | 3.73 | 0.99 | 0.02 | 29.16 | 1.09 | 1.09 | 1.11 |
| 400 | 2.84 | 3.61 | 0.77 | 0.02 | 28.94 | 1.09 | 1.09 | 1.11 |
| 410 | 2.94 | 3.50 | 0.56 | 0.04 | 28.70 | 1.09 | 1.09 | 1.11 |
| 420 | 3.04 | 3.40 | 0.35 | 0.07 | 28.46 | 1.09 | 1.09 | 1.11 |
| 430 | 3.14 | 3.30 | 0.16 | 0.10 | 28.22 | 1.09 | 1.10 | 1.11 |
| 440 | 3.25 | 3.20 | 0.05 | 0.14 | 27.91 | 1.10 | 1.10 | 1.12 |
| 445 | 3.29 | 3.15 | 0.14 | 0.11 | 27.81 | 1.10 | 1.10 | 1.12 |
| 450 | 3.34 | 3.11 | 0.24 | 0.16 | 27.68 | 1.10 | 1.10 | 1.12 |
| 455 | 3.39 | 3.06 | 0.33 | 0.14 | 27.57 | 1.10 | 1.10 | 1.12 |
| 460 | 3.44 | 3.02 | 0.43 | 0.15 | 27.41 | 1.10 | 1.10 | 1.12 |
| 465 | 3.50 | 2.98 | 0.52 | 0.17 | 27.30 | 1.10 | 1.10 | 1.12 |
| 470 | 3.54 | 2.94 | 0.61 | 0.17 | 27.19 | 1.10 | 1.10 | 1.12 |
| 475 | 3.59 | 2.90 | 0.70 | 0.20 | 27.07 | 1.10 | 1.11 | 1.13 |
| 500 | 3.84 | 2.71 | 1.13 | 0.26 | 26.48 | 1.11 | 1.11 | 1.13 |
| 525 | 4.09 | 2.53 | 1.55 | 0.31 | 25.95 | 1.11 | 1.11 | 1.14 |
| 550 | 4.32 | 2.39 | 1.93 | 0.39 | 25.39 | 1.11 | 1.12 | 1.14 |
| 575 | 4.56 | 2.25 | 2.31 | 0.48 | 24.85 | 1.12 | 1.12 | 1.14 |
| 600 | 4.80 | 2.13 | 2.67 | 0.55 | 24.33 | 1.12 | 1.13 | 1.15 |
| 650 | 5.26 | 1.92 | 3.34 | 0.72 | 23.38 | 1.13 | 1.14 | 1.16 |
| 700 | 5.71 | 1.75 | 3.96 | 0.90 | 22.49 | 1.14 | 1.15 | 1.17 |
| 750 | 6.13 | 1.61 | 4.52 | 1.15 | 21.69 | 1.15 | 1.16 | 1.18 |
| 800 | 6.53 | 1.50 | 5.03 | 1.32 | 20.92 | 1.15 | 1.17 | 1.18 |
| 850 | 6.93 | 1.40 | 5.53 | 1.66 | 20.22 | 1.16 | 1.18 | 1.19 |
| 900 | 7.31 | 1.33 | 5.98 | 1.95 | 19.56 | 1.17 | 1.19 | 1.20 |
| 950 | 7.66 | 1.27 | 6.39 | 2.33 | 18.94 | 1.18 | 1.20 | 1.21 |
| 1000 | 8.00 | 1.22 | 6.78 | 2.76 | 18.37 | 1.19 | 1.22 | 1.22 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss

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2 Way-90° Power Splitter/Combiner

HPQ-05+

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = -40°C

| FREQ. (MHz) | TOTAL LOSS ¹ (dB) | | AMP. UNBAL. (dB) | PHASE UNBAL. From 90° (deg.) | ISOLATION (dB) 1-2 | VSWR (:1) | | |
|----------------|---------------------------------|------|------------------------|------------------------------------|--------------------------|--------------|------|------|
| | S-1 | S-2 | | | | S | 1 | 2 |
| 200 | 0.97 | 7.70 | 6.73 | 0.36 | 35.51 | 1.05 | 1.05 | 1.06 |
| 250 | 1.39 | 6.20 | 4.81 | 0.28 | 33.31 | 1.06 | 1.06 | 1.07 |
| 300 | 1.86 | 5.09 | 3.23 | 0.17 | 31.76 | 1.07 | 1.07 | 1.09 |
| 350 | 2.34 | 4.26 | 1.92 | 0.09 | 30.29 | 1.08 | 1.08 | 1.10 |
| 360 | 2.45 | 4.11 | 1.66 | 0.05 | 29.99 | 1.08 | 1.08 | 1.10 |
| 370 | 2.55 | 3.98 | 1.43 | 0.04 | 29.68 | 1.08 | 1.08 | 1.10 |
| 380 | 2.64 | 3.85 | 1.21 | 0.01 | 29.42 | 1.09 | 1.09 | 1.11 |
| 390 | 2.74 | 3.73 | 0.99 | 0.02 | 29.16 | 1.09 | 1.09 | 1.11 |
| 400 | 2.84 | 3.61 | 0.77 | 0.02 | 28.94 | 1.09 | 1.09 | 1.11 |
| 410 | 2.94 | 3.50 | 0.56 | 0.04 | 28.70 | 1.09 | 1.09 | 1.11 |
| 420 | 3.04 | 3.40 | 0.35 | 0.07 | 28.46 | 1.09 | 1.09 | 1.11 |
| 430 | 3.14 | 3.30 | 0.16 | 0.10 | 28.22 | 1.09 | 1.10 | 1.11 |
| 440 | 3.25 | 3.20 | 0.05 | 0.14 | 27.91 | 1.10 | 1.10 | 1.12 |
| 445 | 3.29 | 3.15 | 0.14 | 0.11 | 27.81 | 1.10 | 1.10 | 1.12 |
| 450 | 3.34 | 3.11 | 0.24 | 0.16 | 27.68 | 1.10 | 1.10 | 1.12 |
| 455 | 3.39 | 3.06 | 0.33 | 0.14 | 27.57 | 1.10 | 1.10 | 1.12 |
| 460 | 3.44 | 3.02 | 0.43 | 0.15 | 27.41 | 1.10 | 1.10 | 1.12 |
| 465 | 3.50 | 2.98 | 0.52 | 0.17 | 27.30 | 1.10 | 1.10 | 1.12 |
| 470 | 3.54 | 2.94 | 0.61 | 0.17 | 27.19 | 1.10 | 1.10 | 1.12 |
| 475 | 3.59 | 2.90 | 0.70 | 0.20 | 27.07 | 1.10 | 1.11 | 1.13 |
| 500 | 3.84 | 2.71 | 1.13 | 0.26 | 26.48 | 1.11 | 1.11 | 1.13 |
| 525 | 4.09 | 2.53 | 1.55 | 0.31 | 25.95 | 1.11 | 1.11 | 1.14 |
| 550 | 4.32 | 2.39 | 1.93 | 0.39 | 25.39 | 1.11 | 1.12 | 1.14 |
| 575 | 4.56 | 2.25 | 2.31 | 0.48 | 24.85 | 1.12 | 1.12 | 1.14 |
| 600 | 4.80 | 2.13 | 2.67 | 0.55 | 24.33 | 1.12 | 1.13 | 1.15 |
| 650 | 5.26 | 1.92 | 3.34 | 0.72 | 23.38 | 1.13 | 1.14 | 1.16 |
| 700 | 5.71 | 1.75 | 3.96 | 0.90 | 22.49 | 1.14 | 1.15 | 1.17 |
| 750 | 6.13 | 1.61 | 4.52 | 1.15 | 21.69 | 1.15 | 1.16 | 1.18 |
| 800 | 6.53 | 1.50 | 5.03 | 1.32 | 20.92 | 1.15 | 1.17 | 1.18 |
| 850 | 6.93 | 1.40 | 5.53 | 1.66 | 20.22 | 1.16 | 1.18 | 1.19 |
| 900 | 7.31 | 1.33 | 5.98 | 1.95 | 19.56 | 1.17 | 1.19 | 1.20 |
| 950 | 7.66 | 1.27 | 6.39 | 2.33 | 18.94 | 1.18 | 1.20 | 1.21 |
| 1000 | 8.00 | 1.22 | 6.78 | 2.76 | 18.37 | 1.19 | 1.22 | 1.22 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss

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2 Way-90° Power Splitter/Combiner

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Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +85°C

| FREQ. (MHz) | TOTAL LOSS ¹ (dB) | | AMP. UNBAL. (dB) | PHASE UNBAL. From 90° (deg.) | ISOLATION (dB) 1-2 | VSWR (:1) | | |
|----------------|---------------------------------|------|------------------------|------------------------------------|--------------------------|--------------|------|------|
| | S-1 | S-2 | | | | S | 1 | 2 |
| 200 | 0.97 | 7.70 | 6.73 | 0.36 | 35.51 | 1.05 | 1.05 | 1.06 |
| 250 | 1.39 | 6.20 | 4.81 | 0.28 | 33.31 | 1.06 | 1.06 | 1.07 |
| 300 | 1.86 | 5.09 | 3.23 | 0.17 | 31.76 | 1.07 | 1.07 | 1.09 |
| 350 | 2.34 | 4.26 | 1.92 | 0.09 | 30.29 | 1.08 | 1.08 | 1.10 |
| 360 | 2.45 | 4.11 | 1.66 | 0.05 | 29.99 | 1.08 | 1.08 | 1.10 |
| 370 | 2.55 | 3.98 | 1.43 | 0.04 | 29.68 | 1.08 | 1.08 | 1.10 |
| 380 | 2.64 | 3.85 | 1.21 | 0.01 | 29.42 | 1.09 | 1.09 | 1.11 |
| 390 | 2.74 | 3.73 | 0.99 | 0.02 | 29.16 | 1.09 | 1.09 | 1.11 |
| 400 | 2.84 | 3.61 | 0.77 | 0.02 | 28.94 | 1.09 | 1.09 | 1.11 |
| 410 | 2.94 | 3.50 | 0.56 | 0.04 | 28.70 | 1.09 | 1.09 | 1.11 |
| 420 | 3.04 | 3.40 | 0.35 | 0.07 | 28.46 | 1.09 | 1.09 | 1.11 |
| 430 | 3.14 | 3.30 | 0.16 | 0.10 | 28.22 | 1.09 | 1.10 | 1.11 |
| 440 | 3.25 | 3.20 | 0.05 | 0.14 | 27.91 | 1.10 | 1.10 | 1.12 |
| 445 | 3.29 | 3.15 | 0.14 | 0.11 | 27.81 | 1.10 | 1.10 | 1.12 |
| 450 | 3.34 | 3.11 | 0.24 | 0.16 | 27.68 | 1.10 | 1.10 | 1.12 |
| 455 | 3.39 | 3.06 | 0.33 | 0.14 | 27.57 | 1.10 | 1.10 | 1.12 |
| 460 | 3.44 | 3.02 | 0.43 | 0.15 | 27.41 | 1.10 | 1.10 | 1.12 |
| 465 | 3.50 | 2.98 | 0.52 | 0.17 | 27.30 | 1.10 | 1.10 | 1.12 |
| 470 | 3.54 | 2.94 | 0.61 | 0.17 | 27.19 | 1.10 | 1.10 | 1.12 |
| 475 | 3.59 | 2.90 | 0.70 | 0.20 | 27.07 | 1.10 | 1.11 | 1.13 |
| 500 | 3.84 | 2.71 | 1.13 | 0.26 | 26.48 | 1.11 | 1.11 | 1.13 |
| 525 | 4.09 | 2.53 | 1.55 | 0.31 | 25.95 | 1.11 | 1.11 | 1.14 |
| 550 | 4.32 | 2.39 | 1.93 | 0.39 | 25.39 | 1.11 | 1.12 | 1.14 |
| 575 | 4.56 | 2.25 | 2.31 | 0.48 | 24.85 | 1.12 | 1.12 | 1.14 |
| 600 | 4.80 | 2.13 | 2.67 | 0.55 | 24.33 | 1.12 | 1.13 | 1.15 |
| 650 | 5.26 | 1.92 | 3.34 | 0.72 | 23.38 | 1.13 | 1.14 | 1.16 |
| 700 | 5.71 | 1.75 | 3.96 | 0.90 | 22.49 | 1.14 | 1.15 | 1.17 |
| 750 | 6.13 | 1.61 | 4.52 | 1.15 | 21.69 | 1.15 | 1.16 | 1.18 |
| 800 | 6.53 | 1.50 | 5.03 | 1.32 | 20.92 | 1.15 | 1.17 | 1.18 |
| 850 | 6.93 | 1.40 | 5.53 | 1.66 | 20.22 | 1.16 | 1.18 | 1.19 |
| 900 | 7.31 | 1.33 | 5.98 | 1.95 | 19.56 | 1.17 | 1.19 | 1.20 |
| 950 | 7.66 | 1.27 | 6.39 | 2.33 | 18.94 | 1.18 | 1.20 | 1.21 |
| 1000 | 8.00 | 1.22 | 6.78 | 2.76 | 18.37 | 1.19 | 1.22 | 1.22 |

¹Total Loss = Insertion Loss + 3dB Splitter Loss

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