

# 2 Way-90° Power Splitter/Combiner

SYPQ-ED13926/1

## Typical Performance Data

| FREQUENCY<br>(MHz) | TOTAL LOSS <sup>1</sup><br>(dB) |      | AMPLITUDE<br>UNBALANCE<br>(dB) | ISOLATION<br>(dB) | PHASE<br>UNBALANCE<br>(deg.) | FREQUENCY<br>(MHz) | VSWR<br>(:1) |      |      |
|--------------------|---------------------------------|------|--------------------------------|-------------------|------------------------------|--------------------|--------------|------|------|
|                    | S-1                             | S-2  |                                |                   |                              |                    | S            | 1    | 2    |
| 60.0               | 1.42                            | 6.08 | 4.67                           | 29.37             | 89.41                        | 60.0               | 1.09         | 1.09 | 1.07 |
| 70.0               | 1.75                            | 5.26 | 3.51                           | 29.25             | 89.46                        | 70.0               | 1.09         | 1.09 | 1.08 |
| 80.0               | 2.07                            | 4.62 | 2.56                           | 29.24             | 89.50                        | 80.0               | 1.09         | 1.10 | 1.08 |
| 90.0               | 2.37                            | 4.14 | 1.77                           | 29.33             | 89.56                        | 90.0               | 1.10         | 1.10 | 1.08 |
| 100.0              | 2.65                            | 3.78 | 1.13                           | 29.37             | 89.61                        | 100.0              | 1.10         | 1.10 | 1.09 |
| 110.0              | 2.88                            | 3.50 | 0.62                           | 29.23             | 89.67                        | 110.0              | 1.10         | 1.11 | 1.09 |
| 115.0              | 2.99                            | 3.39 | 0.40                           | 29.03             | 89.71                        | 115.0              | 1.10         | 1.11 | 1.10 |
| 120.0              | 3.08                            | 3.30 | 0.22                           | 28.76             | 89.75                        | 120.0              | 1.10         | 1.11 | 1.10 |
| 125.0              | 3.17                            | 3.23 | 0.06                           | 28.39             | 89.80                        | 125.0              | 1.11         | 1.12 | 1.11 |
| 130.0              | 3.24                            | 3.17 | 0.07                           | 27.91             | 89.86                        | 130.0              | 1.11         | 1.12 | 1.11 |
| 132.0              | 3.26                            | 3.15 | 0.12                           | 27.69             | 89.88                        | 132.0              | 1.11         | 1.12 | 1.11 |
| 134.0              | 3.28                            | 3.13 | 0.16                           | 27.47             | 89.91                        | 134.0              | 1.11         | 1.13 | 1.12 |
| 136.0              | 3.30                            | 3.11 | 0.19                           | 27.19             | 89.94                        | 136.0              | 1.12         | 1.13 | 1.12 |
| 138.0              | 3.32                            | 3.10 | 0.22                           | 26.95             | 89.97                        | 138.0              | 1.12         | 1.13 | 1.12 |
| 140.0              | 3.34                            | 3.09 | 0.25                           | 26.67             | 90.00                        | 140.0              | 1.12         | 1.13 | 1.13 |
| 142.0              | 3.35                            | 3.08 | 0.27                           | 26.38             | 90.03                        | 142.0              | 1.12         | 1.14 | 1.13 |
| 144.0              | 3.37                            | 3.07 | 0.29                           | 26.05             | 90.07                        | 144.0              | 1.12         | 1.14 | 1.13 |
| 146.0              | 3.38                            | 3.07 | 0.31                           | 25.76             | 90.10                        | 146.0              | 1.13         | 1.14 | 1.14 |
| 148.0              | 3.38                            | 3.07 | 0.32                           | 25.44             | 90.15                        | 148.0              | 1.13         | 1.15 | 1.14 |
| 150.0              | 3.39                            | 3.07 | 0.32                           | 25.10             | 90.19                        | 150.0              | 1.13         | 1.15 | 1.15 |
| 152.0              | 3.39                            | 3.08 | 0.32                           | 24.76             | 90.24                        | 152.0              | 1.14         | 1.15 | 1.15 |
| 154.0              | 3.40                            | 3.08 | 0.31                           | 24.43             | 90.29                        | 154.0              | 1.14         | 1.16 | 1.16 |
| 156.0              | 3.40                            | 3.09 | 0.30                           | 24.07             | 90.35                        | 156.0              | 1.14         | 1.16 | 1.16 |
| 158.0              | 3.39                            | 3.11 | 0.29                           | 23.70             | 90.41                        | 158.0              | 1.15         | 1.16 | 1.17 |
| 160.0              | 3.39                            | 3.12 | 0.27                           | 23.34             | 90.47                        | 160.0              | 1.15         | 1.17 | 1.17 |
| 162.0              | 3.38                            | 3.14 | 0.24                           | 22.98             | 90.54                        | 162.0              | 1.16         | 1.18 | 1.18 |
| 164.0              | 3.37                            | 3.16 | 0.21                           | 22.60             | 90.61                        | 164.0              | 1.16         | 1.18 | 1.19 |
| 166.0              | 3.36                            | 3.19 | 0.17                           | 22.21             | 90.70                        | 166.0              | 1.17         | 1.19 | 1.19 |
| 168.0              | 3.34                            | 3.22 | 0.13                           | 21.82             | 90.79                        | 168.0              | 1.17         | 1.19 | 1.20 |
| 170.0              | 3.33                            | 3.25 | 0.08                           | 21.44             | 90.88                        | 170.0              | 1.18         | 1.20 | 1.21 |
| 172.0              | 3.31                            | 3.29 | 0.02                           | 21.05             | 90.99                        | 172.0              | 1.19         | 1.21 | 1.22 |
| 175.0              | 3.27                            | 3.35 | 0.07                           | 20.45             | 91.17                        | 175.0              | 1.20         | 1.22 | 1.23 |
| 180.0              | 3.21                            | 3.48 | 0.27                           | 19.44             | 91.54                        | 180.0              | 1.22         | 1.24 | 1.26 |
| 185.0              | 3.13                            | 3.64 | 0.51                           | 18.43             | 92.01                        | 185.0              | 1.24         | 1.27 | 1.29 |
| 190.0              | 3.04                            | 3.85 | 0.81                           | 17.38             | 92.63                        | 190.0              | 1.27         | 1.30 | 1.33 |
| 195.0              | 2.94                            | 4.10 | 1.16                           | 16.34             | 93.43                        | 195.0              | 1.31         | 1.33 | 1.38 |
| 200.0              | 2.83                            | 4.41 | 1.59                           | 15.28             | 94.49                        | 200.0              | 1.35         | 1.38 | 1.43 |

<sup>1</sup>Total Loss = Insertion Loss + 3dB Splitter Loss



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