

# 2 Way-180° Power Splitter/Combiner

SYPJ-ED14532/1

## Typical Performance Data

| FREQ.<br>(MHz) | TOTAL LOSS <sup>1</sup><br>(dB) |      | AMP.<br>UNBAL.<br>(dB) | ISOLATION<br>(dB)<br>1-2 | PHASE<br>UNBAL.<br>(Deg.) | FREQ.<br>(MHz) | VSWR<br>(:1) |      |      |
|----------------|---------------------------------|------|------------------------|--------------------------|---------------------------|----------------|--------------|------|------|
|                | S-1                             | S-2  |                        |                          |                           |                | S            | 1    | 2    |
| 5.0            | 4.29                            | 4.07 | 0.22                   | 27.41                    | 179.94                    | 5.0            | 1.14         | 1.47 | 1.42 |
| 10.0           | 4.21                            | 3.99 | 0.22                   | 25.36                    | 179.88                    | 10.0           | 1.08         | 1.40 | 1.35 |
| 20.0           | 4.19                            | 3.98 | 0.22                   | 24.61                    | 179.74                    | 20.0           | 1.06         | 1.37 | 1.32 |
| 30.0           | 4.20                            | 3.98 | 0.22                   | 24.43                    | 179.61                    | 30.0           | 1.06         | 1.36 | 1.31 |
| 40.0           | 4.20                            | 3.98 | 0.22                   | 24.38                    | 179.47                    | 40.0           | 1.06         | 1.36 | 1.31 |
| 50.0           | 4.20                            | 3.98 | 0.22                   | 24.35                    | 179.35                    | 50.0           | 1.06         | 1.36 | 1.31 |
| 60.0           | 4.20                            | 3.98 | 0.22                   | 24.31                    | 179.22                    | 60.0           | 1.07         | 1.35 | 1.31 |
| 70.0           | 4.21                            | 3.99 | 0.22                   | 24.28                    | 179.11                    | 70.0           | 1.07         | 1.35 | 1.30 |
| 80.0           | 4.21                            | 3.99 | 0.22                   | 24.26                    | 178.99                    | 80.0           | 1.08         | 1.35 | 1.30 |
| 90.0           | 4.22                            | 3.99 | 0.22                   | 24.24                    | 178.87                    | 90.0           | 1.08         | 1.35 | 1.30 |
| 100.0          | 4.22                            | 4.00 | 0.22                   | 24.20                    | 178.75                    | 100.0          | 1.09         | 1.35 | 1.30 |
| 150.0          | 4.23                            | 4.01 | 0.22                   | 23.90                    | 178.16                    | 150.0          | 1.11         | 1.36 | 1.29 |
| 200.0          | 4.25                            | 4.02 | 0.22                   | 23.59                    | 177.63                    | 200.0          | 1.14         | 1.38 | 1.29 |
| 250.0          | 4.26                            | 4.04 | 0.21                   | 23.26                    | 177.10                    | 250.0          | 1.17         | 1.39 | 1.28 |
| 300.0          | 4.26                            | 4.06 | 0.20                   | 22.85                    | 176.59                    | 300.0          | 1.20         | 1.42 | 1.28 |
| 350.0          | 4.27                            | 4.08 | 0.19                   | 22.51                    | 176.10                    | 350.0          | 1.23         | 1.44 | 1.27 |
| 400.0          | 4.28                            | 4.11 | 0.17                   | 22.18                    | 175.62                    | 400.0          | 1.25         | 1.46 | 1.27 |
| 450.0          | 4.29                            | 4.15 | 0.14                   | 21.84                    | 175.17                    | 450.0          | 1.28         | 1.48 | 1.27 |
| 500.0          | 4.30                            | 4.19 | 0.11                   | 21.54                    | 174.71                    | 500.0          | 1.31         | 1.51 | 1.26 |
| 550.0          | 4.31                            | 4.23 | 0.07                   | 21.28                    | 174.32                    | 550.0          | 1.33         | 1.53 | 1.27 |
| 600.0          | 4.31                            | 4.29 | 0.02                   | 21.17                    | 173.78                    | 600.0          | 1.36         | 1.55 | 1.27 |
| 650.0          | 4.32                            | 4.35 | 0.02                   | 21.01                    | 173.28                    | 650.0          | 1.38         | 1.58 | 1.28 |
| 700.0          | 4.34                            | 4.41 | 0.07                   | 20.89                    | 172.76                    | 700.0          | 1.41         | 1.60 | 1.30 |
| 750.0          | 4.36                            | 4.48 | 0.12                   | 20.89                    | 172.22                    | 750.0          | 1.44         | 1.63 | 1.32 |
| 800.0          | 4.38                            | 4.56 | 0.17                   | 20.92                    | 171.64                    | 800.0          | 1.46         | 1.65 | 1.34 |
| 850.0          | 4.41                            | 4.63 | 0.22                   | 21.05                    | 171.03                    | 850.0          | 1.49         | 1.68 | 1.37 |
| 900.0          | 4.45                            | 4.71 | 0.26                   | 21.25                    | 170.34                    | 900.0          | 1.52         | 1.71 | 1.41 |
| 950.0          | 4.50                            | 4.78 | 0.28                   | 21.50                    | 169.65                    | 950.0          | 1.55         | 1.74 | 1.44 |
| 1000.0         | 4.56                            | 4.85 | 0.29                   | 21.87                    | 168.93                    | 1000.0         | 1.58         | 1.77 | 1.48 |
| 1050.0         | 4.64                            | 4.91 | 0.27                   | 22.26                    | 168.22                    | 1050.0         | 1.61         | 1.81 | 1.52 |
| 1100.0         | 4.73                            | 4.95 | 0.23                   | 22.69                    | 167.61                    | 1100.0         | 1.64         | 1.85 | 1.56 |
| 1150.0         | 4.83                            | 4.99 | 0.16                   | 23.14                    | 167.10                    | 1150.0         | 1.68         | 1.90 | 1.60 |
| 1200.0         | 4.96                            | 5.02 | 0.07                   | 23.56                    | 166.77                    | 1200.0         | 1.72         | 1.95 | 1.64 |

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



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