

# 2 Way-0° Power Splitter/Combiner

# LRPS-2-1J+

## Typical Performance Data

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

| FREQ.<br>(MHz) | TOTAL LOSS <sup>1</sup><br>(dB) |      | AMP.<br>UNBAL.<br>(dB) | PHASE<br>UNBAL.<br>(deg.) | ISOLATION<br>(dB) | VSWR<br>(:1) |      |      |
|----------------|---------------------------------|------|------------------------|---------------------------|-------------------|--------------|------|------|
|                | S-1                             | S-2  |                        |                           |                   | S            | 1    | 2    |
| 5              | 3.21                            | 3.22 | 0.00                   | 0.01                      | 44.75             | 1.09         | 1.17 | 1.17 |
| 10             | 3.24                            | 3.23 | 0.01                   | 0.02                      | 63.34             | 1.09         | 1.16 | 1.17 |
| 15             | 3.24                            | 3.24 | 0.01                   | 0.04                      | 49.68             | 1.09         | 1.16 | 1.17 |
| 20             | 3.24                            | 3.23 | 0.01                   | 0.01                      | 45.53             | 1.09         | 1.16 | 1.17 |
| 25             | 3.24                            | 3.24 | 0.00                   | 0.02                      | 43.15             | 1.09         | 1.16 | 1.17 |
| 30             | 3.24                            | 3.24 | 0.00                   | 0.01                      | 41.65             | 1.09         | 1.15 | 1.17 |
| 35             | 3.24                            | 3.24 | 0.00                   | 0.05                      | 40.42             | 1.09         | 1.15 | 1.17 |
| 40             | 3.25                            | 3.25 | 0.00                   | 0.05                      | 39.49             | 1.10         | 1.15 | 1.16 |
| 45             | 3.26                            | 3.25 | 0.01                   | 0.06                      | 38.72             | 1.10         | 1.15 | 1.16 |
| 50             | 3.26                            | 3.26 | 0.00                   | 0.05                      | 38.00             | 1.10         | 1.15 | 1.16 |
| 55             | 3.26                            | 3.26 | 0.00                   | 0.07                      | 37.36             | 1.10         | 1.15 | 1.16 |
| 60             | 3.27                            | 3.26 | 0.00                   | 0.09                      | 36.74             | 1.10         | 1.15 | 1.16 |
| 65             | 3.27                            | 3.27 | 0.00                   | 0.09                      | 36.21             | 1.10         | 1.15 | 1.16 |
| 70             | 3.27                            | 3.27 | 0.00                   | 0.10                      | 35.71             | 1.11         | 1.15 | 1.16 |
| 75             | 3.28                            | 3.27 | 0.01                   | 0.11                      | 35.28             | 1.11         | 1.15 | 1.16 |
| 100            | 3.29                            | 3.29 | 0.00                   | 0.15                      | 33.64             | 1.11         | 1.15 | 1.16 |
| 125            | 3.31                            | 3.31 | 0.00                   | 0.19                      | 32.32             | 1.12         | 1.15 | 1.16 |
| 150            | 3.33                            | 3.32 | 0.01                   | 0.17                      | 31.13             | 1.12         | 1.14 | 1.15 |
| 175            | 3.35                            | 3.34 | 0.01                   | 0.23                      | 30.23             | 1.12         | 1.14 | 1.15 |
| 200            | 3.37                            | 3.35 | 0.01                   | 0.27                      | 29.63             | 1.13         | 1.14 | 1.15 |
| 225            | 3.39                            | 3.37 | 0.02                   | 0.28                      | 29.16             | 1.13         | 1.14 | 1.14 |
| 250            | 3.40                            | 3.38 | 0.02                   | 0.33                      | 28.76             | 1.13         | 1.14 | 1.14 |
| 275            | 3.42                            | 3.39 | 0.03                   | 0.33                      | 28.45             | 1.14         | 1.13 | 1.14 |
| 300            | 3.44                            | 3.40 | 0.03                   | 0.34                      | 28.27             | 1.14         | 1.13 | 1.13 |
| 325            | 3.46                            | 3.42 | 0.04                   | 0.36                      | 28.33             | 1.14         | 1.13 | 1.14 |
| 350            | 3.48                            | 3.44 | 0.04                   | 0.36                      | 28.55             | 1.15         | 1.13 | 1.14 |
| 375            | 3.51                            | 3.46 | 0.05                   | 0.38                      | 28.87             | 1.15         | 1.13 | 1.14 |
| 400            | 3.53                            | 3.48 | 0.05                   | 0.36                      | 29.37             | 1.16         | 1.13 | 1.14 |
| 425            | 3.57                            | 3.50 | 0.06                   | 0.35                      | 29.99             | 1.17         | 1.14 | 1.14 |
| 450            | 3.60                            | 3.53 | 0.07                   | 0.29                      | 30.73             | 1.18         | 1.15 | 1.15 |
| 475            | 3.65                            | 3.57 | 0.07                   | 0.24                      | 31.16             | 1.21         | 1.16 | 1.16 |
| 500            | 3.70                            | 3.62 | 0.08                   | 0.19                      | 30.91             | 1.24         | 1.18 | 1.18 |
| 525            | 3.77                            | 3.68 | 0.09                   | 0.09                      | 29.67             | 1.27         | 1.21 | 1.20 |
| 550            | 3.85                            | 3.76 | 0.09                   | 0.01                      | 27.66             | 1.32         | 1.24 | 1.22 |
| 575            | 3.96                            | 3.86 | 0.10                   | 0.15                      | 25.35             | 1.39         | 1.28 | 1.26 |
| 600            | 4.10                            | 3.99 | 0.11                   | 0.31                      | 23.05             | 1.47         | 1.33 | 1.30 |
| 625            | 4.28                            | 4.15 | 0.13                   | 0.51                      | 20.94             | 1.56         | 1.38 | 1.35 |
| 650            | 4.50                            | 4.36 | 0.14                   | 0.71                      | 18.98             | 1.69         | 1.45 | 1.40 |
| 675            | 4.78                            | 4.63 | 0.15                   | 1.03                      | 17.21             | 1.83         | 1.52 | 1.47 |
| 700            | 5.14                            | 4.97 | 0.17                   | 1.36                      | 15.59             | 2.01         | 1.60 | 1.54 |
| 725            | 5.59                            | 5.40 | 0.19                   | 1.75                      | 14.15             | 2.23         | 1.70 | 1.62 |
| 730            | 5.69                            | 5.50 | 0.19                   | 1.81                      | 13.88             | 2.27         | 1.72 | 1.64 |

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



# 2 Way-0° Power Splitter/Combiner

# LRPS-2-1J+

## Typical Performance Data

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

| FREQ.<br>(MHz) | TOTAL LOSS <sup>1</sup><br>(dB) |      | AMP.<br>UNBAL.<br>(dB) | PHASE<br>UNBAL.<br>(deg.) | ISOLATION<br>(dB) | VSWR<br>(:1) |      |      |
|----------------|---------------------------------|------|------------------------|---------------------------|-------------------|--------------|------|------|
|                | S-1                             | S-2  |                        |                           |                   | S            | 1    | 2    |
| 5              | 3.25                            | 3.26 | 0.01                   | 0.03                      | 29.53             | 1.09         | 1.24 | 1.25 |
| 10             | 3.21                            | 3.21 | 0.00                   | 0.07                      | 34.42             | 1.09         | 1.17 | 1.18 |
| 15             | 3.19                            | 3.19 | 0.00                   | 0.11                      | 37.42             | 1.10         | 1.14 | 1.16 |
| 20             | 3.18                            | 3.18 | 0.00                   | 0.10                      | 38.86             | 1.10         | 1.13 | 1.15 |
| 25             | 3.17                            | 3.18 | 0.01                   | 0.11                      | 39.28             | 1.10         | 1.12 | 1.15 |
| 30             | 3.17                            | 3.17 | 0.00                   | 0.12                      | 39.01             | 1.11         | 1.12 | 1.14 |
| 35             | 3.17                            | 3.17 | 0.00                   | 0.12                      | 38.45             | 1.11         | 1.11 | 1.14 |
| 40             | 3.17                            | 3.18 | 0.00                   | 0.14                      | 37.79             | 1.11         | 1.11 | 1.14 |
| 45             | 3.18                            | 3.18 | 0.01                   | 0.14                      | 37.13             | 1.12         | 1.11 | 1.14 |
| 50             | 3.18                            | 3.19 | 0.01                   | 0.20                      | 36.49             | 1.12         | 1.11 | 1.14 |
| 55             | 3.18                            | 3.19 | 0.01                   | 0.20                      | 35.89             | 1.12         | 1.11 | 1.14 |
| 60             | 3.18                            | 3.19 | 0.01                   | 0.19                      | 35.32             | 1.13         | 1.11 | 1.13 |
| 65             | 3.19                            | 3.19 | 0.01                   | 0.22                      | 34.82             | 1.13         | 1.11 | 1.13 |
| 70             | 3.19                            | 3.20 | 0.00                   | 0.24                      | 34.38             | 1.13         | 1.11 | 1.13 |
| 75             | 3.19                            | 3.20 | 0.00                   | 0.25                      | 34.04             | 1.13         | 1.11 | 1.13 |
| 100            | 3.20                            | 3.21 | 0.00                   | 0.34                      | 33.22             | 1.13         | 1.12 | 1.11 |
| 125            | 3.21                            | 3.22 | 0.01                   | 0.41                      | 32.90             | 1.12         | 1.12 | 1.11 |
| 150            | 3.23                            | 3.23 | 0.01                   | 0.53                      | 31.69             | 1.13         | 1.11 | 1.11 |
| 175            | 3.24                            | 3.25 | 0.01                   | 0.62                      | 30.01             | 1.15         | 1.11 | 1.11 |
| 200            | 3.26                            | 3.26 | 0.00                   | 0.74                      | 28.91             | 1.16         | 1.12 | 1.11 |
| 225            | 3.27                            | 3.27 | 0.00                   | 0.82                      | 28.71             | 1.16         | 1.12 | 1.11 |
| 250            | 3.28                            | 3.27 | 0.01                   | 0.91                      | 28.81             | 1.15         | 1.11 | 1.11 |
| 275            | 3.30                            | 3.29 | 0.01                   | 1.03                      | 28.51             | 1.16         | 1.11 | 1.12 |
| 300            | 3.31                            | 3.30 | 0.01                   | 1.14                      | 27.89             | 1.17         | 1.11 | 1.12 |
| 325            | 3.33                            | 3.32 | 0.02                   | 1.27                      | 27.74             | 1.17         | 1.12 | 1.12 |
| 350            | 3.34                            | 3.32 | 0.02                   | 1.37                      | 28.20             | 1.16         | 1.11 | 1.11 |
| 375            | 3.36                            | 3.34 | 0.03                   | 1.49                      | 28.85             | 1.16         | 1.11 | 1.11 |
| 400            | 3.38                            | 3.35 | 0.03                   | 1.63                      | 29.16             | 1.17         | 1.11 | 1.12 |
| 425            | 3.41                            | 3.37 | 0.04                   | 1.76                      | 29.22             | 1.18         | 1.12 | 1.12 |
| 450            | 3.44                            | 3.40 | 0.05                   | 1.95                      | 29.59             | 1.19         | 1.14 | 1.13 |
| 475            | 3.48                            | 3.42 | 0.05                   | 2.09                      | 30.00             | 1.20         | 1.15 | 1.14 |
| 500            | 3.52                            | 3.46 | 0.06                   | 2.26                      | 29.65             | 1.23         | 1.17 | 1.16 |
| 525            | 3.58                            | 3.52 | 0.06                   | 2.47                      | 28.35             | 1.27         | 1.19 | 1.18 |
| 550            | 3.66                            | 3.58 | 0.07                   | 2.70                      | 26.45             | 1.32         | 1.23 | 1.21 |
| 575            | 3.76                            | 3.68 | 0.08                   | 2.91                      | 24.28             | 1.40         | 1.28 | 1.25 |
| 600            | 3.89                            | 3.80 | 0.09                   | 3.17                      | 22.11             | 1.48         | 1.32 | 1.29 |
| 625            | 4.06                            | 3.95 | 0.11                   | 3.43                      | 20.12             | 1.59         | 1.38 | 1.34 |
| 650            | 4.28                            | 4.16 | 0.12                   | 3.75                      | 18.26             | 1.72         | 1.45 | 1.40 |
| 675            | 4.56                            | 4.42 | 0.13                   | 4.11                      | 16.53             | 1.89         | 1.53 | 1.47 |
| 700            | 4.90                            | 4.76 | 0.14                   | 4.48                      | 14.92             | 2.09         | 1.61 | 1.55 |
| 725            | 5.35                            | 5.19 | 0.16                   | 4.91                      | 13.50             | 2.34         | 1.70 | 1.64 |
| 730            | 5.45                            | 5.28 | 0.17                   | 5.00                      | 13.24             | 2.39         | 1.72 | 1.65 |

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

# 2 Way-0° Power Splitter/Combiner

# LRPS-2-1J+

## Typical Performance Data

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

| FREQ.<br>(MHz) | TOTAL LOSS <sup>1</sup><br>(dB) |      | AMP.<br>UNBAL.<br>(dB) | PHASE<br>UNBAL.<br>(deg.) | ISOLATION<br>(dB) | VSWR<br>(:1) |      |      |
|----------------|---------------------------------|------|------------------------|---------------------------|-------------------|--------------|------|------|
|                | S-1                             | S-2  |                        |                           |                   | S            | 1    | 2    |
| 5              | 3.30                            | 3.30 | 0.01                   | 0.00                      | 37.27             | 1.07         | 1.22 | 1.22 |
| 10             | 3.33                            | 3.32 | 0.01                   | 0.01                      | 37.80             | 1.07         | 1.21 | 1.22 |
| 15             | 3.33                            | 3.33 | 0.01                   | 0.00                      | 37.07             | 1.07         | 1.21 | 1.22 |
| 20             | 3.33                            | 3.32 | 0.01                   | 0.07                      | 36.19             | 1.07         | 1.21 | 1.22 |
| 25             | 3.33                            | 3.33 | 0.01                   | 0.10                      | 35.34             | 1.07         | 1.21 | 1.21 |
| 30             | 3.34                            | 3.33 | 0.01                   | 0.14                      | 34.65             | 1.07         | 1.21 | 1.21 |
| 35             | 3.34                            | 3.33 | 0.01                   | 0.22                      | 34.04             | 1.08         | 1.21 | 1.21 |
| 40             | 3.35                            | 3.34 | 0.01                   | 0.23                      | 33.54             | 1.08         | 1.21 | 1.21 |
| 45             | 3.35                            | 3.34 | 0.01                   | 0.29                      | 33.17             | 1.08         | 1.21 | 1.21 |
| 50             | 3.36                            | 3.35 | 0.01                   | 0.30                      | 32.82             | 1.08         | 1.22 | 1.20 |
| 55             | 3.36                            | 3.35 | 0.01                   | 0.36                      | 32.58             | 1.07         | 1.21 | 1.20 |
| 60             | 3.36                            | 3.35 | 0.01                   | 0.40                      | 32.38             | 1.07         | 1.21 | 1.20 |
| 65             | 3.36                            | 3.36 | 0.01                   | 0.47                      | 32.25             | 1.07         | 1.21 | 1.20 |
| 70             | 3.37                            | 3.36 | 0.01                   | 0.48                      | 32.14             | 1.07         | 1.21 | 1.20 |
| 75             | 3.37                            | 3.37 | 0.01                   | 0.50                      | 32.09             | 1.07         | 1.21 | 1.20 |
| 100            | 3.38                            | 3.39 | 0.00                   | 0.66                      | 31.99             | 1.08         | 1.19 | 1.21 |
| 125            | 3.40                            | 3.41 | 0.01                   | 0.81                      | 31.08             | 1.10         | 1.19 | 1.22 |
| 150            | 3.43                            | 3.43 | 0.00                   | 0.88                      | 29.59             | 1.11         | 1.19 | 1.21 |
| 175            | 3.44                            | 3.44 | 0.00                   | 1.06                      | 28.65             | 1.10         | 1.19 | 1.20 |
| 200            | 3.46                            | 3.45 | 0.01                   | 1.22                      | 28.51             | 1.10         | 1.18 | 1.20 |
| 225            | 3.48                            | 3.47 | 0.01                   | 1.35                      | 28.58             | 1.10         | 1.17 | 1.19 |
| 250            | 3.50                            | 3.48 | 0.02                   | 1.47                      | 28.27             | 1.11         | 1.17 | 1.19 |
| 275            | 3.52                            | 3.50 | 0.02                   | 1.58                      | 27.76             | 1.12         | 1.17 | 1.18 |
| 300            | 3.54                            | 3.51 | 0.03                   | 1.72                      | 27.51             | 1.12         | 1.17 | 1.17 |
| 325            | 3.57                            | 3.54 | 0.04                   | 1.89                      | 27.81             | 1.12         | 1.16 | 1.17 |
| 350            | 3.59                            | 3.55 | 0.04                   | 2.01                      | 28.38             | 1.12         | 1.15 | 1.17 |
| 375            | 3.63                            | 3.58 | 0.05                   | 2.11                      | 28.91             | 1.14         | 1.16 | 1.17 |
| 400            | 3.66                            | 3.61 | 0.05                   | 2.20                      | 29.39             | 1.15         | 1.16 | 1.17 |
| 425            | 3.70                            | 3.64 | 0.06                   | 2.32                      | 30.12             | 1.16         | 1.17 | 1.18 |
| 450            | 3.74                            | 3.67 | 0.07                   | 2.35                      | 31.40             | 1.18         | 1.18 | 1.18 |
| 475            | 3.80                            | 3.72 | 0.08                   | 2.40                      | 32.89             | 1.21         | 1.19 | 1.19 |
| 500            | 3.86                            | 3.78 | 0.09                   | 2.45                      | 33.39             | 1.24         | 1.21 | 1.21 |
| 525            | 3.94                            | 3.85 | 0.09                   | 2.43                      | 32.04             | 1.28         | 1.23 | 1.23 |
| 550            | 4.03                            | 3.93 | 0.11                   | 2.41                      | 29.77             | 1.33         | 1.27 | 1.25 |
| 575            | 4.15                            | 4.03 | 0.12                   | 2.38                      | 27.13             | 1.39         | 1.30 | 1.28 |
| 600            | 4.30                            | 4.16 | 0.14                   | 2.29                      | 24.51             | 1.47         | 1.35 | 1.31 |
| 625            | 4.49                            | 4.33 | 0.16                   | 2.16                      | 22.14             | 1.56         | 1.40 | 1.36 |
| 650            | 4.72                            | 4.54 | 0.19                   | 2.01                      | 20.03             | 1.68         | 1.46 | 1.41 |
| 675            | 5.01                            | 4.80 | 0.21                   | 1.78                      | 18.18             | 1.81         | 1.53 | 1.46 |
| 700            | 5.36                            | 5.13 | 0.23                   | 1.54                      | 16.50             | 1.97         | 1.61 | 1.53 |
| 725            | 5.80                            | 5.54 | 0.27                   | 1.19                      | 15.01             | 2.17         | 1.70 | 1.60 |
| 730            | 5.90                            | 5.63 | 0.27                   | 1.12                      | 14.73             | 2.21         | 1.72 | 1.62 |

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