

# Directional Coupler

RC-ED12494/1

## Typical Performance Data

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | COUPLING<br>(dB) | DIRECTIVITY<br>(dB) | RETURN LOSS |       |       |
|--------------------|---------------------------|------------------|---------------------|-------------|-------|-------|
|                    |                           |                  |                     | IN          | OUT   | CPL   |
| 0.8                | 4.67                      | 16.23            | 24.59               | 2.21        | 2.20  | 3.08  |
| 0.9                | 4.09                      | 15.72            | 24.36               | 2.64        | 2.61  | 3.60  |
| 1.0                | 3.60                      | 15.30            | 24.12               | 3.06        | 3.03  | 4.13  |
| 2.0                | 1.49                      | 13.61            | 22.68               | 6.99        | 6.99  | 8.57  |
| 3.0                | 0.98                      | 13.24            | 22.25               | 10.10       | 10.19 | 11.87 |
| 4.0                | 0.84                      | 13.13            | 22.11               | 12.48       | 12.75 | 14.34 |
| 5.0                | 0.79                      | 13.13            | 22.07               | 14.25       | 14.77 | 16.14 |
| 7.0                | 0.79                      | 13.13            | 22.10               | 16.52       | 17.67 | 18.43 |
| 8.0                | 0.79                      | 13.14            | 22.07               | 17.24       | 18.72 | 19.16 |
| 10.0               | 0.80                      | 13.14            | 22.03               | 18.23       | 20.33 | 20.19 |
| 15.0               | 0.78                      | 13.12            | 21.86               | 19.53       | 22.79 | 21.56 |
| 20.0               | 0.77                      | 13.11            | 21.73               | 20.26       | 24.30 | 22.33 |
| 40.0               | 0.70                      | 13.04            | 21.25               | 21.85       | 28.03 | 24.06 |
| 60.0               | 0.67                      | 12.99            | 20.87               | 22.68       | 30.52 | 24.94 |
| 80.0               | 0.65                      | 12.98            | 20.59               | 23.18       | 32.45 | 25.43 |
| 100.0              | 0.64                      | 12.95            | 20.30               | 23.52       | 34.42 | 25.74 |
| 150.0              | 0.64                      | 12.93            | 19.43               | 24.31       | 39.77 | 26.31 |
| 200.0              | 0.63                      | 12.91            | 18.55               | 25.00       | 45.03 | 25.98 |
| 250.0              | 0.64                      | 12.87            | 17.72               | 25.76       | 47.10 | 25.11 |
| 300.0              | 0.64                      | 12.84            | 16.83               | 27.16       | 39.97 | 24.48 |
| 350.0              | 0.65                      | 12.82            | 16.05               | 27.94       | 34.87 | 23.65 |
| 400.0              | 0.67                      | 12.77            | 15.35               | 29.42       | 31.58 | 23.03 |
| 450.0              | 0.66                      | 12.72            | 14.68               | 30.39       | 28.69 | 22.18 |
| 500.0              | 0.67                      | 12.67            | 14.11               | 30.79       | 26.69 | 21.66 |
| 550.0              | 0.67                      | 12.62            | 13.60               | 30.13       | 25.10 | 20.98 |
| 600.0              | 0.66                      | 12.54            | 13.03               | 29.20       | 23.74 | 20.49 |
| 650.0              | 0.67                      | 12.49            | 12.57               | 27.57       | 22.53 | 19.95 |
| 700.0              | 0.65                      | 12.43            | 12.20               | 25.56       | 21.31 | 19.43 |
| 750.0              | 0.66                      | 12.38            | 11.85               | 24.38       | 20.40 | 18.95 |
| 800.0              | 0.66                      | 12.31            | 11.56               | 22.55       | 19.46 | 18.55 |
| 850.0              | 0.72                      | 12.26            | 11.28               | 21.79       | 18.71 | 18.14 |
| 870.0              | 0.72                      | 12.24            | 11.19               | 21.41       | 18.45 | 17.99 |
| 900.0              | 0.73                      | 12.20            | 11.06               | 20.55       | 18.06 | 17.87 |
| 950.0              | 0.81                      | 12.14            | 10.85               | 20.11       | 17.55 | 17.59 |
| 1000.0             | 0.84                      | 12.07            | 10.66               | 19.15       | 17.07 | 17.41 |
| 1200.0             | 1.14                      | 11.78            | 9.96                | 17.82       | 16.24 | 17.08 |
| 1400.0             | 1.39                      | 11.52            | 9.30                | 17.70       | 16.33 | 17.46 |
| 1600.0             | 1.61                      | 11.35            | 8.48                | 19.10       | 17.75 | 18.51 |
| 1800.0             | 1.83                      | 11.14            | 7.68                | 22.40       | 20.03 | 19.51 |
| 2000.0             | 1.98                      | 10.82            | 7.02                | 27.47       | 21.07 | 19.33 |
| 2200.0             | 1.96                      | 10.40            | 6.54                | 24.61       | 19.08 | 17.90 |