

# Bi-Directional Coupler

SYDC-ED13289/2

## Typical Performance Data

| FREQ.<br>(MHz) | INSERTION LOSS |         | COUPLING |         | DIRECTIVITY |         | RETURN LOSS |       |       |       |
|----------------|----------------|---------|----------|---------|-------------|---------|-------------|-------|-------|-------|
|                | (dB)           |         | (dB)     |         | (dB)        |         | (dB)        |       |       |       |
|                | IN-OUT         | FWD-REV | IN-FWD   | OUT-REV | IN-REV      | OUT-FWD | IN          | OUT   | FWD   | REV   |
| 10.0           | 0.68           | 0.66    | 9.68     | 9.88    | 20.67       | 20.61   | 16.59       | 15.79 | 16.63 | 15.87 |
| 15.0           | 0.64           | 0.62    | 9.69     | 9.80    | 22.79       | 22.34   | 19.90       | 19.19 | 19.77 | 19.26 |
| 20.0           | 0.64           | 0.63    | 9.70     | 9.80    | 23.67       | 23.00   | 22.03       | 21.69 | 21.70 | 21.72 |
| 25.0           | 0.68           | 0.66    | 9.72     | 9.84    | 23.93       | 23.22   | 23.17       | 23.81 | 22.65 | 23.78 |
| 30.0           | 0.72           | 0.71    | 9.75     | 9.89    | 23.87       | 23.20   | 23.47       | 25.52 | 22.84 | 25.39 |
| 50.0           | 0.79           | 0.76    | 9.80     | 9.98    | 23.72       | 23.06   | 23.81       | 28.33 | 22.97 | 27.55 |
| 75.0           | 0.79           | 0.77    | 9.82     | 9.98    | 23.76       | 23.15   | 24.67       | 29.29 | 23.37 | 27.73 |
| 100.0          | 0.79           | 0.76    | 9.82     | 9.96    | 23.84       | 23.36   | 25.58       | 29.63 | 23.74 | 27.63 |
| 140.0          | 0.78           | 0.76    | 9.82     | 9.94    | 24.13       | 23.72   | 27.16       | 30.12 | 24.33 | 27.66 |
| 180.0          | 0.79           | 0.76    | 9.81     | 9.90    | 24.31       | 24.24   | 28.76       | 30.92 | 24.69 | 27.76 |
| 220.0          | 0.80           | 0.77    | 9.79     | 9.87    | 24.53       | 24.79   | 30.34       | 31.36 | 24.89 | 27.87 |
| 260.0          | 0.81           | 0.78    | 9.76     | 9.84    | 24.90       | 25.58   | 31.03       | 31.13 | 25.18 | 28.13 |
| 300.0          | 0.83           | 0.79    | 9.73     | 9.79    | 25.08       | 26.70   | 30.62       | 30.35 | 25.45 | 28.38 |
| 340.0          | 0.85           | 0.80    | 9.70     | 9.74    | 25.40       | 28.13   | 28.81       | 29.02 | 25.55 | 28.70 |
| 380.0          | 0.87           | 0.81    | 9.66     | 9.69    | 25.93       | 29.55   | 26.53       | 27.33 | 25.69 | 28.99 |
| 420.0          | 0.90           | 0.83    | 9.62     | 9.63    | 26.29       | 30.59   | 24.29       | 25.59 | 25.63 | 29.26 |
| 460.0          | 0.93           | 0.84    | 9.57     | 9.56    | 27.00       | 30.28   | 22.29       | 23.97 | 25.78 | 29.67 |
| 500.0          | 0.97           | 0.86    | 9.53     | 9.49    | 27.78       | 28.35   | 20.50       | 22.42 | 25.83 | 30.11 |
| 505.0          | 0.98           | 0.87    | 9.53     | 9.48    | 27.83       | 28.06   | 20.31       | 22.24 | 25.80 | 30.13 |
| 510.0          | 0.98           | 0.87    | 9.52     | 9.47    | 27.92       | 27.78   | 20.09       | 22.06 | 25.75 | 30.14 |
| 515.0          | 0.99           | 0.87    | 9.52     | 9.47    | 28.01       | 27.47   | 19.89       | 21.88 | 25.72 | 30.21 |
| 520.0          | 0.99           | 0.88    | 9.51     | 9.46    | 28.12       | 27.15   | 19.69       | 21.71 | 25.71 | 30.23 |
| 526.0          | 1.00           | 0.88    | 9.50     | 9.45    | 28.25       | 26.78   | 19.45       | 21.50 | 25.67 | 30.28 |
| 532.0          | 1.01           | 0.88    | 9.50     | 9.43    | 28.34       | 26.40   | 19.22       | 21.30 | 25.65 | 30.35 |
| 538.0          | 1.01           | 0.88    | 9.49     | 9.42    | 28.44       | 26.04   | 18.99       | 21.11 | 25.63 | 30.36 |
| 544.0          | 1.02           | 0.89    | 9.49     | 9.41    | 28.56       | 25.70   | 18.75       | 20.91 | 25.60 | 30.42 |
| 550.0          | 1.03           | 0.89    | 9.48     | 9.40    | 28.64       | 25.38   | 18.53       | 20.73 | 25.56 | 30.41 |
| 600.0          | 1.10           | 0.93    | 9.43     | 9.30    | 29.73       | 22.59   | 16.76       | 19.14 | 25.14 | 30.50 |
| 650.0          | 1.19           | 0.96    | 9.38     | 9.18    | 30.23       | 20.08   | 15.16       | 17.74 | 24.31 | 30.28 |



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IF/RF MICROWAVE COMPONENTS



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