

# Directional Coupler

## TCD-ED10103/1

### Typical Performance Data

| FREQUENCY<br>(MHz) | INSERTION<br>LOSS<br>(dB) | COUPLING<br>(dB) | DIRECTIVITY<br>(dB) | RETURN LOSS |             |       |
|--------------------|---------------------------|------------------|---------------------|-------------|-------------|-------|
|                    |                           |                  |                     | IN          | (dB)<br>OUT | CPL   |
| 1.0                | 2.24                      | 7.66             | 17.50               | 12.54       | 15.17       | 8.88  |
| 2.0                | 2.02                      | 7.55             | 19.17               | 14.24       | 19.37       | 11.88 |
| 3.0                | 1.94                      | 7.51             | 19.93               | 15.00       | 22.02       | 13.19 |
| 4.0                | 1.89                      | 7.48             | 20.35               | 15.40       | 24.04       | 13.85 |
| 5.0                | 1.86                      | 7.47             | 20.60               | 15.66       | 25.60       | 14.23 |
| 10.0               | 1.80                      | 7.44             | 21.11               | 16.17       | 31.32       | 14.83 |
| 20.0               | 1.77                      | 7.42             | 21.25               | 16.42       | 38.85       | 14.58 |
| 72.0               | 1.76                      | 7.42             | 20.88               | 16.75       | 42.51       | 13.21 |
| 124.0              | 1.77                      | 7.41             | 20.33               | 16.84       | 36.77       | 14.81 |
| 176.0              | 1.76                      | 7.41             | 19.63               | 16.99       | 33.01       | 14.05 |
| 228.0              | 1.77                      | 7.42             | 18.82               | 17.06       | 30.69       | 14.96 |
| 280.0              | 1.78                      | 7.40             | 17.98               | 17.06       | 27.92       | 14.50 |
| 332.0              | 1.79                      | 7.40             | 17.13               | 17.16       | 25.74       | 14.89 |
| 384.0              | 1.81                      | 7.38             | 16.30               | 17.30       | 23.94       | 15.05 |
| 436.0              | 1.84                      | 7.38             | 15.53               | 17.35       | 23.23       | 15.60 |
| 488.0              | 1.86                      | 7.37             | 14.80               | 17.25       | 22.14       | 16.22 |
| 540.0              | 1.90                      | 7.38             | 14.14               | 16.85       | 21.28       | 16.79 |
| 592.0              | 1.93                      | 7.37             | 13.55               | 16.85       | 20.73       | 17.10 |
| 644.0              | 1.98                      | 7.38             | 13.00               | 16.44       | 19.98       | 16.93 |
| 696.0              | 2.02                      | 7.39             | 12.53               | 16.48       | 19.99       | 16.90 |
| 748.0              | 2.07                      | 7.40             | 12.09               | 16.30       | 19.45       | 16.77 |
| 800.0              | 2.13                      | 7.42             | 11.70               | 16.18       | 19.54       | 17.23 |
| 880.0              | 2.21                      | 7.46             | 11.18               | 15.89       | 19.56       | 18.18 |
| 960.0              | 2.31                      | 7.49             | 10.69               | 16.25       | 20.07       | 18.68 |
| 1040.0             | 2.42                      | 7.54             | 10.18               | 15.67       | 21.64       | 18.05 |
| 1120.0             | 2.55                      | 7.60             | 9.60                | 15.56       | 20.43       | 17.47 |
| 1200.0             | 2.70                      | 7.68             | 8.93                | 15.61       | 21.15       | 18.07 |
| 1280.0             | 2.87                      | 7.77             | 8.15                | 15.43       | 20.10       | 18.49 |
| 1360.0             | 3.10                      | 7.88             | 7.33                | 14.96       | 19.79       | 17.40 |
| 1440.0             | 3.36                      | 8.02             | 6.47                | 14.46       | 20.05       | 15.63 |
| 1520.0             | 3.67                      | 8.16             | 5.65                | 14.22       | 18.63       | 14.15 |
| 1600.0             | 4.01                      | 8.33             | 4.94                | 13.85       | 17.89       | 13.37 |
| 1700.0             | 4.51                      | 8.63             | 4.06                | 12.86       | 18.45       | 12.83 |
| 1800.0             | 5.05                      | 8.97             | 3.33                | 12.16       | 18.72       | 11.33 |
| 1900.0             | 5.56                      | 9.40             | 2.68                | 11.73       | 17.60       | 10.16 |
| 2000.0             | 6.19                      | 9.79             | 2.07                | 10.57       | 19.23       | 9.86  |
| 2100.0             | 6.41                      | 10.26            | 1.52                | 9.80        | 17.60       | 9.52  |