

*Typical Performance Data*

| FREQ.<br><br>(MHz) | INSERTION LOSS |        |        | INPUT RETURN LOSS |        |        | OUTPUT RETURN LOSS |        |        |
|--------------------|----------------|--------|--------|-------------------|--------|--------|--------------------|--------|--------|
|                    | (dB)           |        |        | (dB)              |        |        | (dB)               |        |        |
|                    | @-40°C         | @+25°C | @+85°C | @-40°C            | @+25°C | @+85°C | @-40°C             | @+25°C | @+85°C |
| 10.0               | 77.97          | 77.62  | 78.41  | 0.04              | 0.05   | 0.06   | 0.00               | 0.00   | 0.00   |
| 14.0               | 73.02          | 72.51  | 72.76  | 0.05              | 0.06   | 0.06   | 0.00               | 0.00   | 0.00   |
| 20.0               | 66.50          | 66.23  | 66.32  | 0.06              | 0.07   | 0.08   | 0.00               | 0.00   | 0.00   |
| 24.0               | 63.56          | 63.34  | 63.13  | 0.07              | 0.08   | 0.09   | 0.00               | 0.00   | 0.00   |
| 30.0               | 59.48          | 59.49  | 59.35  | 0.08              | 0.09   | 0.10   | 0.00               | 0.00   | 0.00   |
| 34.0               | 57.28          | 57.14  | 57.06  | 0.08              | 0.10   | 0.10   | 0.00               | 0.00   | 0.00   |
| 40.0               | 54.35          | 54.21  | 54.21  | 0.09              | 0.11   | 0.12   | 0.00               | 0.00   | 0.01   |
| 44.0               | 52.62          | 52.44  | 52.51  | 0.10              | 0.12   | 0.12   | 0.00               | 0.01   | 0.01   |
| 50.0               | 50.25          | 50.24  | 50.18  | 0.11              | 0.13   | 0.14   | 0.00               | 0.01   | 0.01   |
| 56.0               | 48.16          | 48.11  | 48.03  | 0.12              | 0.15   | 0.15   | 0.00               | 0.01   | 0.01   |
| 60.0               | 46.89          | 46.80  | 46.75  | 0.13              | 0.16   | 0.16   | 0.00               | 0.01   | 0.01   |
| 64.0               | 45.63          | 45.58  | 45.51  | 0.14              | 0.16   | 0.17   | 0.01               | 0.01   | 0.01   |
| 70.0               | 43.88          | 43.84  | 43.76  | 0.15              | 0.18   | 0.18   | 0.00               | 0.01   | 0.01   |
| 76.0               | 42.23          | 42.20  | 42.12  | 0.16              | 0.19   | 0.19   | 0.01               | 0.01   | 0.02   |
| 80.0               | 41.19          | 41.14  | 41.08  | 0.17              | 0.20   | 0.20   | 0.01               | 0.02   | 0.02   |
| 84.0               | 40.19          | 40.12  | 40.05  | 0.17              | 0.21   | 0.21   | 0.01               | 0.02   | 0.02   |
| 90.0               | 38.71          | 38.65  | 38.60  | 0.19              | 0.22   | 0.23   | 0.01               | 0.02   | 0.02   |
| 100.0              | 36.39          | 36.34  | 36.26  | 0.21              | 0.25   | 0.26   | 0.02               | 0.03   | 0.03   |
| 110.0              | 34.18          | 34.12  | 34.05  | 0.24              | 0.28   | 0.29   | 0.02               | 0.04   | 0.04   |
| 120.0              | 32.04          | 31.99  | 31.91  | 0.27              | 0.31   | 0.33   | 0.03               | 0.05   | 0.06   |
| 130.0              | 29.98          | 29.92  | 29.86  | 0.31              | 0.36   | 0.39   | 0.04               | 0.06   | 0.07   |
| 140.0              | 27.99          | 27.94  | 27.87  | 0.37              | 0.43   | 0.46   | 0.06               | 0.08   | 0.10   |
| 192.0              | 23.87          | 22.66  | 21.69  | 2.66              | 3.14   | 3.57   | 0.53               | 0.63   | 0.72   |
| 200.0              | 10.66          | 10.42  | 10.19  | 5.01              | 5.75   | 6.37   | 1.39               | 1.58   | 1.74   |
| 210.0              | 4.57           | 4.68   | 4.75   | 6.50              | 6.88   | 7.13   | 3.94               | 4.14   | 4.32   |
| 218.6              | 2.69           | 2.83   | 2.93   | 8.26              | 8.62   | 8.84   | 7.00               | 7.28   | 7.49   |
| 230.0              | 1.51           | 1.66   | 1.78   | 14.35             | 14.87  | 15.14  | 14.47              | 15.06  | 15.45  |
| 237.6              | 1.21           | 1.37   | 1.49   | 21.03             | 21.63  | 21.76  | 26.61              | 28.48  | 29.41  |
| 249.0              | 1.10           | 1.26   | 1.37   | 21.55             | 21.51  | 21.42  | 22.12              | 21.72  | 21.58  |
| 258.5              | 1.09           | 1.24   | 1.36   | 20.99             | 21.10  | 21.10  | 19.70              | 19.71  | 19.82  |
| 263.0              | 1.09           | 1.25   | 1.36   | 22.23             | 22.42  | 22.37  | 20.36              | 20.49  | 20.70  |
| 263.5              | 1.09           | 1.25   | 1.36   | 22.45             | 22.64  | 22.58  | 20.50              | 20.65  | 20.87  |
| 278.0              | 1.15           | 1.32   | 1.46   | 36.33             | 32.88  | 29.83  | 32.19              | 33.70  | 35.31  |
| 287.5              | 1.27           | 1.47   | 1.62   | 31.72             | 30.54  | 29.52  | 33.79              | 32.71  | 30.75  |
| 297.0              | 1.54           | 1.78   | 1.98   | 28.97             | 29.18  | 28.58  | 21.51              | 21.23  | 20.43  |
| 308.4              | 2.67           | 3.02   | 3.33   | 10.89             | 10.71  | 10.50  | 9.84               | 9.73   | 9.51   |
| 316.0              | 4.70           | 5.17   | 5.57   | 5.55              | 5.51   | 5.46   | 5.15               | 5.17   | 5.13   |
| 328.0              | 10.27          | 10.81  | 11.26  | 2.00              | 2.07   | 2.13   | 1.91               | 2.03   | 2.10   |
| 346.0              | 20.50          | 21.04  | 21.47  | 0.73              | 0.81   | 0.87   | 0.75               | 0.85   | 0.93   |
| 360.0              | 29.36          | 29.93  | 30.40  | 0.47              | 0.54   | 0.59   | 0.50               | 0.59   | 0.65   |
| 400.0              | 40.10          | 40.09  | 40.05  | 0.25              | 0.30   | 0.33   | 0.27               | 0.33   | 0.38   |
| 450.0              | 38.05          | 38.21  | 38.33  | 0.18              | 0.23   | 0.25   | 0.17               | 0.23   | 0.27   |
| 500.0              | 40.45          | 40.60  | 40.72  | 0.16              | 0.20   | 0.22   | 0.13               | 0.19   | 0.22   |
| 550.0              | 43.59          | 43.71  | 43.83  | 0.15              | 0.19   | 0.21   | 0.11               | 0.16   | 0.20   |
| 600.0              | 47.06          | 47.23  | 47.34  | 0.15              | 0.19   | 0.21   | 0.10               | 0.15   | 0.19   |
| 800.0              | 82.32          | 82.22  | 80.92  | 0.16              | 0.19   | 0.21   | 0.08               | 0.15   | 0.19   |
| 1000.0             | 58.60          | 59.05  | 59.24  | 0.17              | 0.20   | 0.22   | 0.08               | 0.16   | 0.21   |
| 1100.0             | 58.58          | 58.95  | 59.28  | 0.17              | 0.21   | 0.23   | 0.09               | 0.17   | 0.22   |
| 1200.0             | 61.50          | 62.40  | 62.96  | 0.18              | 0.22   | 0.24   | 0.09               | 0.18   | 0.24   |
| 1300.0             | 75.56          | 72.35  | 69.52  | 0.21              | 0.25   | 0.28   | 0.10               | 0.19   | 0.25   |
| 1400.0             | 50.11          | 49.64  | 49.09  | 0.36              | 0.43   | 0.49   | 0.10               | 0.21   | 0.27   |
| 1500.0             | 33.62          | 34.40  | 34.99  | 4.12              | 3.79   | 3.48   | 0.12               | 0.23   | 0.29   |
| 1600.0             | 45.20          | 45.60  | 45.80  | 0.28              | 0.33   | 0.36   | 0.12               | 0.23   | 0.30   |
| 1700.0             | 49.72          | 50.19  | 50.48  | 0.21              | 0.26   | 0.29   | 0.13               | 0.24   | 0.31   |
| 1800.0             | 53.42          | 54.26  | 54.64  | 0.19              | 0.24   | 0.28   | 0.14               | 0.26   | 0.33   |
| 1900.0             | 57.98          | 59.45  | 60.18  | 0.18              | 0.24   | 0.29   | 0.15               | 0.27   | 0.34   |
| 2000.0             | 66.94          | 70.43  | 71.95  | 0.18              | 0.25   | 0.29   | 0.16               | 0.28   | 0.35   |
| 2500.0             | 48.30          | 47.75  | 47.64  | 0.20              | 0.30   | 0.38   | 0.20               | 0.33   | 0.41   |
| 3000.0             | 41.63          | 41.27  | 41.21  | 0.22              | 0.35   | 0.46   | 0.22               | 0.36   | 0.44   |
| 4000.0             | 32.36          | 32.09  | 32.12  | 0.35              | 0.55   | 0.72   | 0.23               | 0.38   | 0.47   |

## Typical Performance Data

| FREQ.<br><br>(MHz) | GROUP DELAY |        |        |
|--------------------|-------------|--------|--------|
|                    | (nsec)      |        |        |
|                    | @-40°C      | @+25°C | @+85°C |
| 230.0              | 9.23        | 9.11   | 9.01   |
| 231.9              | 8.95        | 8.85   | 8.76   |
| 233.8              | 8.70        | 8.61   | 8.53   |
| 235.7              | 8.47        | 8.40   | 8.33   |
| 237.6              | 8.26        | 8.19   | 8.13   |
| 239.5              | 8.07        | 8.01   | 7.95   |
| 241.4              | 7.89        | 7.83   | 7.79   |
| 243.3              | 7.72        | 7.67   | 7.63   |
| 245.2              | 7.57        | 7.53   | 7.49   |
| 247.1              | 7.43        | 7.39   | 7.36   |
| 249.0              | 7.31        | 7.28   | 7.25   |
| 250.9              | 7.20        | 7.17   | 7.15   |
| 252.8              | 7.10        | 7.08   | 7.06   |
| 254.7              | 7.02        | 7.00   | 6.99   |
| 256.6              | 6.95        | 6.94   | 6.93   |
| 258.5              | 6.90        | 6.89   | 6.88   |
| 259.0              | 6.86        | 6.85   | 6.85   |
| 260.9              | 6.83        | 6.83   | 6.83   |
| 262.8              | 6.82        | 6.82   | 6.82   |
| 263.0              | 6.82        | 6.82   | 6.82   |
| 263.5              | 6.82        | 6.82   | 6.82   |
| 266.6              | 6.82        | 6.83   | 6.84   |
| 268.5              | 6.85        | 6.86   | 6.87   |
| 270.4              | 6.88        | 6.89   | 6.90   |
| 272.3              | 6.92        | 6.94   | 6.96   |
| 274.2              | 6.98        | 7.00   | 7.02   |
| 276.1              | 7.05        | 7.07   | 7.09   |
| 278.0              | 7.13        | 7.16   | 7.18   |
| 279.9              | 7.23        | 7.26   | 7.29   |
| 281.8              | 7.35        | 7.38   | 7.41   |
| 283.7              | 7.48        | 7.52   | 7.55   |
| 285.6              | 7.63        | 7.67   | 7.71   |
| 287.5              | 7.81        | 7.85   | 7.88   |
| 289.4              | 8.00        | 8.04   | 8.08   |
| 291.3              | 8.21        | 8.25   | 8.29   |
| 293.2              | 8.43        | 8.47   | 8.50   |
| 295.1              | 8.66        | 8.70   | 8.73   |
| 297.0              | 8.90        | 8.93   | 8.94   |