

*Typical Performance Data*

| FREQ.<br><br>(MHz) | INSERTION LOSS |        |         | INPUT RETURN LOSS |        |         | OUTPUT RETURN LOSS |        |         |
|--------------------|----------------|--------|---------|-------------------|--------|---------|--------------------|--------|---------|
|                    | (dB)           |        |         | (dB)              |        |         | (dB)               |        |         |
|                    | @-55°C         | @+25°C | @+125°C | @-55°C            | @+25°C | @+125°C | @-55°C             | @+25°C | @+125°C |
| 10                 | 0.09           | 0.10   | 0.12    | 39.82             | 40.22  | 37.59   | 39.13              | 39.15  | 36.93   |
| 100                | 0.10           | 0.12   | 0.16    | 34.17             | 33.11  | 32.40   | 33.72              | 32.69  | 31.92   |
| 200                | 0.13           | 0.16   | 0.20    | 28.32             | 28.58  | 28.72   | 27.72              | 27.86  | 27.88   |
| 250                | 0.14           | 0.17   | 0.22    | 26.66             | 27.22  | 27.65   | 25.96              | 26.33  | 26.56   |
| 300                | 0.15           | 0.19   | 0.24    | 25.48             | 26.13  | 26.73   | 24.66              | 25.08  | 25.42   |
| 350                | 0.16           | 0.20   | 0.26    | 24.62             | 25.23  | 25.91   | 23.68              | 24.05  | 24.41   |
| 400                | 0.17           | 0.22   | 0.27    | 23.92             | 24.46  | 25.15   | 22.87              | 23.15  | 23.49   |
| 500                | 0.19           | 0.24   | 0.31    | 22.68             | 23.15  | 23.82   | 21.50              | 21.69  | 21.99   |
| 550                | 0.20           | 0.26   | 0.32    | 22.08             | 22.58  | 23.22   | 20.89              | 21.08  | 21.37   |
| 600                | 0.21           | 0.27   | 0.34    | 21.56             | 22.07  | 22.71   | 20.35              | 20.55  | 20.83   |
| 650                | 0.22           | 0.28   | 0.36    | 21.09             | 21.61  | 22.24   | 19.87              | 20.09  | 20.36   |
| 700                | 0.23           | 0.30   | 0.37    | 20.67             | 21.20  | 21.81   | 19.47              | 19.69  | 19.96   |
| 750                | 0.24           | 0.31   | 0.39    | 20.30             | 20.82  | 21.41   | 19.12              | 19.34  | 19.60   |
| 1000               | 0.30           | 0.38   | 0.47    | 19.19             | 19.57  | 19.95   | 18.34              | 18.47  | 18.61   |
| 1500               | 0.40           | 0.51   | 0.65    | 22.79             | 23.21  | 23.60   | 23.01              | 23.10  | 23.04   |
| 1800               | 0.54           | 0.68   | 0.87    | 31.29             | 30.42  | 29.34   | 25.47              | 24.71  | 23.83   |
| 2000               | 0.73           | 0.92   | 1.15    | 21.46             | 21.58  | 21.76   | 20.07              | 19.92  | 19.77   |
| 2100               | 0.87           | 1.08   | 1.34    | 20.25             | 20.87  | 21.78   | 19.59              | 19.84  | 20.19   |
| 2200               | 1.04           | 1.29   | 1.63    | 22.81             | 25.04  | 29.04   | 21.91              | 22.89  | 23.77   |
| 2350               | 1.81           | 2.32   | 3.09    | 18.08             | 15.15  | 12.50   | 16.59              | 14.76  | 12.77   |
| 2400               | 2.55           | 3.30   | 4.39    | 11.68             | 9.98   | 8.34    | 11.66              | 10.38  | 9.10    |
| 2500               | 6.16           | 7.57   | 9.44    | 4.38              | 3.85   | 3.43    | 5.17               | 4.83   | 4.62    |
| 2600               | 12.96          | 14.88  | 17.29   | 1.71              | 1.69   | 1.74    | 2.66               | 2.79   | 3.01    |
| 2660               | 18.10          | 20.23  | 22.89   | 1.13              | 1.21   | 1.34    | 2.07               | 2.27   | 2.55    |
| 2700               | 21.86          | 24.14  | 27.01   | 0.91              | 1.03   | 1.18    | 1.82               | 2.05   | 2.33    |
| 2760               | 28.10          | 30.69  | 34.02   | 0.71              | 0.85   | 1.02    | 1.55               | 1.78   | 2.06    |
| 2800               | 32.85          | 35.78  | 39.58   | 0.63              | 0.77   | 0.94    | 1.40               | 1.63   | 1.90    |
| 2850               | 40.00          | 43.52  | 47.32   | 0.55              | 0.69   | 0.87    | 1.25               | 1.47   | 1.72    |
| 3000               | 50.96          | 50.58  | 50.58   | 0.39              | 0.54   | 0.71    | 0.90               | 1.10   | 1.31    |
| 3100               | 50.00          | 51.00  | 52.38   | 0.33              | 0.48   | 0.64    | 0.74               | 0.92   | 1.11    |
| 3200               | 53.44          | 55.22  | 57.56   | 0.28              | 0.43   | 0.58    | 0.62               | 0.79   | 0.95    |
| 3300               | 60.17          | 63.10  | 66.06   | 0.25              | 0.39   | 0.53    | 0.53               | 0.68   | 0.83    |
| 4000               | 63.27          | 64.23  | 65.53   | 0.13              | 0.24   | 0.34    | 0.23               | 0.34   | 0.43    |
| 4500               | 82.51          | 90.81  | 86.68   | 0.08              | 0.18   | 0.26    | 0.15               | 0.25   | 0.35    |
| 5000               | 74.60          | 73.67  | 71.76   | 0.05              | 0.14   | 0.22    | 0.11               | 0.22   | 0.34    |
| 5400               | 70.26          | 69.48  | 69.29   | 0.03              | 0.13   | 0.21    | 0.08               | 0.21   | 0.37    |
| 5500               | 68.91          | 68.59  | 68.28   | 0.02              | 0.12   | 0.21    | 0.08               | 0.21   | 0.38    |
| 5600               | 67.50          | 67.41  | 66.95   | 0.02              | 0.12   | 0.21    | 0.08               | 0.21   | 0.39    |
| 5700               | 66.93          | 66.79  | 66.22   | 0.02              | 0.12   | 0.21    | 0.08               | 0.22   | 0.40    |
| 5800               | 66.47          | 66.99  | 66.03   | 0.01              | 0.12   | 0.22    | 0.07               | 0.22   | 0.41    |
| 5900               | 66.86          | 67.02  | 66.16   | 0.01              | 0.12   | 0.22    | 0.07               | 0.22   | 0.42    |
| 6000               | 66.21          | 66.28  | 66.32   | 0.01              | 0.12   | 0.23    | 0.07               | 0.23   | 0.43    |
| 6100               | 64.25          | 63.79  | 63.34   | 0.00              | 0.12   | 0.23    | 0.08               | 0.23   | 0.45    |
| 6200               | 62.53          | 62.55  | 62.16   | 0.00              | 0.12   | 0.24    | 0.08               | 0.24   | 0.47    |
| 6300               | 62.22          | 62.24  | 61.53   | 0.00              | 0.12   | 0.25    | 0.08               | 0.25   | 0.48    |
| 6400               | 60.71          | 61.12  | 60.50   | 0.00              | 0.13   | 0.26    | 0.08               | 0.26   | 0.50    |
| 6500               | 59.96          | 60.43  | 59.61   | 0.00              | 0.13   | 0.27    | 0.09               | 0.26   | 0.51    |
| 6600               | 60.24          | 59.80  | 59.25   | 0.00              | 0.14   | 0.28    | 0.09               | 0.27   | 0.53    |
| 6700               | 59.87          | 58.61  | 58.88   | 0.00              | 0.14   | 0.29    | 0.09               | 0.28   | 0.54    |
| 6800               | 58.86          | 57.71  | 58.54   | 0.00              | 0.15   | 0.31    | 0.10               | 0.28   | 0.55    |
| 7000               | 55.38          | 54.97  | 54.30   | 0.01              | 0.16   | 0.34    | 0.11               | 0.30   | 0.58    |
| 7500               | 52.80          | 52.57  | 52.01   | 0.02              | 0.20   | 0.42    | 0.12               | 0.32   | 0.61    |
| 8500               | 44.99          | 44.48  | 44.41   | 0.08              | 0.29   | 0.58    | 0.13               | 0.32   | 0.58    |
| 9000               | 41.92          | 41.61  | 41.71   | 0.11              | 0.33   | 0.64    | 0.11               | 0.30   | 0.51    |
| 10000              | 36.58          | 36.95  | 37.01   | 0.14              | 0.36   | 0.67    | 0.06               | 0.22   | 0.35    |
| 11000              | 33.04          | 33.27  | 33.27   | 0.16              | 0.37   | 0.60    | 0.01               | 0.18   | 0.30    |
| 11500              | 31.62          | 31.78  | 32.05   | 0.15              | 0.33   | 0.53    | 0.01               | 0.17   | 0.33    |
| 12000              | 31.14          | 31.25  | 31.31   | 0.13              | 0.31   | 0.47    | 0.01               | 0.19   | 0.40    |
| 13000              | 29.71          | 29.93  | 30.07   | 0.11              | 0.29   | 0.46    | 0.04               | 0.21   | 0.57    |
| 13500              | 29.72          | 29.94  | 30.14   | 0.09              | 0.30   | 0.52    | 0.06               | 0.23   | 0.66    |

\* Temperature test data was based on the underlying chip



*Typical Performance Data*

| FREQ.<br><br>(MHz) | GROUP DELAY |        |         |
|--------------------|-------------|--------|---------|
|                    | (nsec)      |        |         |
|                    | @-55°C      | @+25°C | @+125°C |
| 10                 | 0.25        | 0.27   | 0.27    |
| 50                 | 0.25        | 0.27   | 0.27    |
| 100                | 0.26        | 0.26   | 0.27    |
| 150                | 0.26        | 0.26   | 0.27    |
| 200                | 0.26        | 0.26   | 0.27    |
| 250                | 0.26        | 0.26   | 0.27    |
| 300                | 0.26        | 0.26   | 0.27    |
| 350                | 0.26        | 0.26   | 0.27    |
| 400                | 0.26        | 0.26   | 0.27    |
| 450                | 0.26        | 0.26   | 0.27    |
| 500                | 0.26        | 0.27   | 0.27    |
| 550                | 0.26        | 0.27   | 0.27    |
| 600                | 0.27        | 0.27   | 0.27    |
| 650                | 0.27        | 0.27   | 0.28    |
| 700                | 0.27        | 0.27   | 0.28    |
| 750                | 0.27        | 0.28   | 0.28    |
| 800                | 0.28        | 0.28   | 0.29    |
| 850                | 0.28        | 0.28   | 0.29    |
| 900                | 0.29        | 0.29   | 0.29    |
| 950                | 0.29        | 0.29   | 0.30    |
| 1000               | 0.29        | 0.30   | 0.30    |
| 1050               | 0.30        | 0.30   | 0.31    |
| 1100               | 0.30        | 0.31   | 0.31    |
| 1150               | 0.31        | 0.31   | 0.32    |
| 1200               | 0.32        | 0.32   | 0.33    |
| 1250               | 0.32        | 0.33   | 0.33    |
| 1300               | 0.33        | 0.34   | 0.34    |
| 1350               | 0.34        | 0.34   | 0.35    |
| 1400               | 0.35        | 0.35   | 0.36    |
| 1450               | 0.36        | 0.36   | 0.37    |
| 1500               | 0.37        | 0.38   | 0.38    |
| 1550               | 0.38        | 0.39   | 0.40    |
| 1600               | 0.40        | 0.40   | 0.41    |
| 1650               | 0.41        | 0.42   | 0.43    |
| 1700               | 0.43        | 0.43   | 0.45    |
| 1750               | 0.44        | 0.45   | 0.47    |
| 1800               | 0.46        | 0.47   | 0.49    |
| 1850               | 0.49        | 0.49   | 0.51    |
| 1900               | 0.51        | 0.52   | 0.54    |
| 1950               | 0.54        | 0.55   | 0.57    |
| 2000               | 0.57        | 0.58   | 0.60    |

\* Temperature test data was based on the underlying chip