

## Typical Performance Data

| FREQ.<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             | 75.98          | 76.08  | 75.97   | 0.00              | 0.04   | 0.06    | 0.08               | 0.12   | 0.14    |
| 50             | 71.83          | 72.58  | 72.14   | 0.01              | 0.03   | 0.05    | 0.08               | 0.12   | 0.15    |
| 100            | 65.69          | 65.86  | 65.92   | 0.02              | 0.03   | 0.05    | 0.09               | 0.13   | 0.16    |
| 200            | 59.75          | 59.75  | 59.78   | 0.01              | 0.07   | 0.09    | 0.11               | 0.16   | 0.19    |
| 300            | 56.39          | 56.45  | 56.45   | 0.05              | 0.10   | 0.14    | 0.14               | 0.19   | 0.22    |
| 400            | 54.16          | 54.16  | 54.19   | 0.07              | 0.13   | 0.18    | 0.15               | 0.20   | 0.25    |
| 500            | 52.51          | 52.54  | 52.55   | 0.09              | 0.15   | 0.21    | 0.16               | 0.22   | 0.27    |
| 600            | 51.25          | 51.29  | 51.30   | 0.08              | 0.15   | 0.22    | 0.17               | 0.23   | 0.29    |
| 700            | 50.28          | 50.32  | 50.36   | 0.07              | 0.15   | 0.21    | 0.17               | 0.25   | 0.31    |
| 800            | 49.54          | 49.58  | 49.60   | 0.05              | 0.13   | 0.20    | 0.18               | 0.26   | 0.32    |
| 900            | 48.96          | 49.04  | 49.06   | 0.03              | 0.12   | 0.19    | 0.19               | 0.27   | 0.34    |
| 1000           | 48.59          | 48.66  | 48.68   | 0.02              | 0.12   | 0.20    | 0.19               | 0.28   | 0.36    |
| 1100           | 48.38          | 48.46  | 48.49   | 0.03              | 0.14   | 0.22    | 0.19               | 0.29   | 0.37    |
| 1200           | 48.40          | 48.51  | 48.57   | 0.05              | 0.16   | 0.25    | 0.18               | 0.29   | 0.37    |
| 1300           | 48.73          | 48.88  | 49.00   | 0.08              | 0.19   | 0.29    | 0.18               | 0.29   | 0.38    |
| 1400           | 49.60          | 49.85  | 50.07   | 0.10              | 0.22   | 0.33    | 0.19               | 0.30   | 0.40    |
| 1500           | 51.72          | 52.25  | 52.76   | 0.12              | 0.25   | 0.36    | 0.20               | 0.32   | 0.43    |
| 1550           | 53.86          | 54.66  | 55.43   | 0.12              | 0.26   | 0.38    | 0.20               | 0.33   | 0.45    |
| 1600           | 57.70          | 58.54  | 58.58   | 0.12              | 0.26   | 0.39    | 0.21               | 0.35   | 0.47    |
| 1650           | 60.44          | 59.19  | 57.13   | 0.13              | 0.27   | 0.40    | 0.23               | 0.37   | 0.49    |
| 1700           | 56.04          | 53.55  | 51.18   | 0.13              | 0.28   | 0.41    | 0.24               | 0.38   | 0.52    |
| 1750           | 49.12          | 47.40  | 45.70   | 0.13              | 0.29   | 0.43    | 0.26               | 0.41   | 0.55    |
| 1800           | 43.97          | 42.64  | 41.28   | 0.14              | 0.31   | 0.46    | 0.28               | 0.44   | 0.59    |
| 1850           | 39.79          | 38.65  | 37.45   | 0.15              | 0.33   | 0.49    | 0.31               | 0.47   | 0.63    |
| 1950           | 32.72          | 31.74  | 30.68   | 0.20              | 0.41   | 0.60    | 0.38               | 0.56   | 0.74    |
| 2000           | 29.50          | 28.55  | 27.52   | 0.25              | 0.47   | 0.68    | 0.43               | 0.62   | 0.82    |
| 2100           | 23.33          | 22.40  | 21.40   | 0.42              | 0.67   | 0.94    | 0.58               | 0.82   | 1.06    |
| 2300           | 11.36          | 10.51  | 9.65    | 1.52              | 2.06   | 2.74    | 1.72               | 2.24   | 2.90    |
| 2470           | 3.47           | 3.26   | 3.14    | 7.40              | 9.25   | 11.43   | 8.22               | 10.17  | 12.59   |
| 2500           | 2.73           | 2.65   | 2.65    | 9.76              | 11.94  | 14.31   | 11.10              | 13.58  | 16.50   |
| 2700           | 1.22           | 1.40   | 1.59    | 15.99             | 16.04  | 15.80   | 17.18              | 16.84  | 16.40   |
| 3000           | 0.78           | 0.92   | 1.07    | 16.85             | 18.13  | 19.27   | 17.04              | 18.34  | 19.46   |
| 3200           | 0.57           | 0.72   | 0.86    | 22.06             | 24.08  | 26.31   | 22.33              | 24.44  | 27.00   |
| 3500           | 0.40           | 0.55   | 0.69    | 28.83             | 30.24  | 29.24   | 29.62              | 31.00  | 30.72   |
| 3700           | 0.33           | 0.48   | 0.63    | 28.31             | 28.28  | 26.13   | 27.44              | 27.91  | 26.60   |
| 4000           | 0.27           | 0.42   | 0.56    | 25.77             | 25.77  | 23.94   | 24.87              | 25.72  | 24.80   |
| 4200           | 0.24           | 0.39   | 0.53    | 24.34             | 24.55  | 23.23   | 23.71              | 24.62  | 24.08   |
| 4400           | 0.22           | 0.36   | 0.50    | 23.00             | 23.36  | 22.66   | 22.56              | 23.51  | 23.40   |
| 4600           | 0.20           | 0.34   | 0.48    | 21.75             | 22.28  | 22.18   | 21.68              | 22.68  | 23.02   |
| 4800           | 0.17           | 0.32   | 0.45    | 20.65             | 21.41  | 21.87   | 21.05              | 22.14  | 22.95   |
| 5000           | 0.16           | 0.31   | 0.45    | 20.26             | 20.98  | 22.09   | 20.92              | 21.88  | 23.20   |
| 5200           | 0.16           | 0.31   | 0.44    | 20.48             | 21.06  | 22.96   | 21.18              | 21.92  | 23.88   |
| 5400           | 0.14           | 0.29   | 0.43    | 20.73             | 21.34  | 23.93   | 21.67              | 22.31  | 24.86   |
| 5600           | 0.12           | 0.27   | 0.42    | 21.31             | 22.03  | 25.75   | 22.59              | 23.30  | 26.75   |
| 5800           | 0.10           | 0.26   | 0.41    | 22.64             | 23.60  | 29.02   | 24.36              | 25.22  | 29.26   |
| 6000           | 0.09           | 0.25   | 0.40    | 25.21             | 26.42  | 35.58   | 26.93              | 27.97  | 30.47   |
| 6200           | 0.07           | 0.23   | 0.40    | 29.08             | 30.65  | 35.35   | 30.77              | 31.66  | 29.17   |
| 6400           | 0.06           | 0.23   | 0.40    | 31.76             | 32.38  | 28.56   | 31.97              | 31.35  | 26.10   |
| 6600           | 0.06           | 0.23   | 0.42    | 28.34             | 27.73  | 24.29   | 27.69              | 26.73  | 23.11   |
| 6800           | 0.08           | 0.25   | 0.43    | 24.50             | 23.87  | 21.57   | 23.66              | 23.06  | 20.90   |
| 7000           | 0.08           | 0.26   | 0.44    | 21.27             | 20.84  | 19.50   | 20.82              | 20.42  | 19.25   |
| 7500           | 0.13           | 0.32   | 0.49    | 16.62             | 16.46  | 16.35   | 16.71              | 16.61  | 16.73   |
| 8000           | 0.15           | 0.35   | 0.52    | 14.66             | 14.77  | 15.30   | 14.80              | 15.03  | 15.91   |
| 8500           | 0.15           | 0.35   | 0.52    | 14.03             | 14.37  | 15.30   | 14.28              | 14.74  | 16.09   |
| 9000           | 0.12           | 0.33   | 0.52    | 14.55             | 15.10  | 16.31   | 14.49              | 15.16  | 16.67   |
| 9500           | 0.08           | 0.30   | 0.52    | 15.31             | 15.92  | 17.24   | 15.21              | 15.87  | 17.28   |
| 10000          | 0.08           | 0.31   | 0.56    | 15.92             | 16.50  | 17.80   | 15.70              | 16.20  | 17.23   |
| 11000          | 0.14           | 0.40   | 0.69    | 15.32             | 15.74  | 16.20   | 15.17              | 15.40  | 15.72   |
| 13500          | 0.25           | 0.57   | 0.90    | 21.97             | 22.61  | 23.81   | 23.10              | 23.56  | 25.08   |
| 14500          | 0.39           | 0.79   | 1.14    | 19.52             | 19.66  | 22.31   | 20.30              | 20.33  | 23.88   |

## Typical Performance Data

| FREQ.<br><br>(MHz) | GROUP DELAY |        |         |
|--------------------|-------------|--------|---------|
|                    | (nsec)      |        |         |
|                    | @-55°C      | @+25°C | @+125°C |
| 2700               | 0.70        | 0.67   | 0.64    |
| 3000               | 0.44        | 0.43   | 0.42    |
| 3300               | 0.32        | 0.32   | 0.32    |
| 3500               | 0.28        | 0.27   | 0.27    |
| 3800               | 0.22        | 0.22   | 0.22    |
| 4100               | 0.19        | 0.19   | 0.18    |
| 4400               | 0.16        | 0.16   | 0.16    |
| 4700               | 0.14        | 0.14   | 0.14    |
| 5000               | 0.12        | 0.12   | 0.13    |
| 5300               | 0.11        | 0.11   | 0.11    |
| 5600               | 0.10        | 0.10   | 0.11    |
| 5900               | 0.10        | 0.10   | 0.10    |
| 6200               | 0.09        | 0.09   | 0.09    |
| 6500               | 0.09        | 0.09   | 0.09    |
| 6800               | 0.08        | 0.08   | 0.08    |
| 7100               | 0.08        | 0.08   | 0.08    |
| 7400               | 0.07        | 0.07   | 0.08    |
| 7700               | 0.07        | 0.07   | 0.07    |
| 8000               | 0.07        | 0.07   | 0.07    |
| 8300               | 0.07        | 0.07   | 0.07    |
| 8600               | 0.07        | 0.07   | 0.07    |
| 8900               | 0.07        | 0.07   | 0.07    |
| 9200               | 0.07        | 0.07   | 0.07    |
| 9500               | 0.07        | 0.07   | 0.07    |
| 9800               | 0.07        | 0.07   | 0.07    |
| 10100              | 0.07        | 0.07   | 0.07    |
| 10400              | 0.07        | 0.07   | 0.07    |
| 10700              | 0.07        | 0.07   | 0.07    |
| 11000              | 0.07        | 0.07   | 0.07    |
| 11300              | 0.07        | 0.07   | 0.07    |
| 11600              | 0.07        | 0.07   | 0.07    |
| 11900              | 0.07        | 0.07   | 0.07    |
| 12200              | 0.07        | 0.07   | 0.07    |
| 12500              | 0.07        | 0.07   | 0.08    |
| 12800              | 0.07        | 0.08   | 0.08    |
| 13100              | 0.08        | 0.08   | 0.08    |
| 13500              | 0.08        | 0.08   | 0.09    |
| 13700              | 0.08        | 0.09   | 0.09    |
| 14000              | 0.09        | 0.09   | 0.10    |
| 14500              | 0.10        | 0.10   | 0.11    |