

## Typical Performance Data

| FREQ.<br>(MHz) | INSERTION LOSS |        |         | INPUT RETURN LOSS |        |         | OUTPUT RETURN LOSS |        |         |
|----------------|----------------|--------|---------|-------------------|--------|---------|--------------------|--------|---------|
|                | (dB)           |        |         | (dB)              |        |         | (dB)               |        |         |
|                | @-55°C         | @+25°C | @+100°C | @-55°C            | @+25°C | @+100°C | @-55°C             | @+25°C | @+100°C |
| 10             | 70.75          | 72.17  | 87.29   | 0.10              | 0.14   | 0.16    | 0.10               | 0.15   | 0.17    |
| 20             | 69.02          | 68.50  | 68.29   | 0.09              | 0.14   | 0.15    | 0.09               | 0.14   | 0.15    |
| 80             | 56.67          | 56.55  | 56.83   | 0.09              | 0.16   | 0.17    | 0.12               | 0.18   | 0.20    |
| 100            | 54.91          | 55.00  | 54.59   | 0.10              | 0.17   | 0.18    | 0.13               | 0.19   | 0.21    |
| 200            | 48.94          | 49.09  | 49.10   | 0.14              | 0.21   | 0.23    | 0.16               | 0.23   | 0.25    |
| 300            | 45.70          | 45.80  | 45.91   | 0.17              | 0.24   | 0.27    | 0.19               | 0.26   | 0.29    |
| 400            | 43.56          | 43.60  | 43.61   | 0.18              | 0.27   | 0.30    | 0.20               | 0.29   | 0.33    |
| 500            | 41.84          | 41.91  | 41.91   | 0.19              | 0.30   | 0.34    | 0.21               | 0.32   | 0.36    |
| 600            | 40.42          | 40.49  | 40.44   | 0.20              | 0.32   | 0.37    | 0.22               | 0.35   | 0.40    |
| 700            | 39.09          | 39.17  | 39.11   | 0.22              | 0.36   | 0.41    | 0.24               | 0.39   | 0.45    |
| 800            | 37.84          | 37.90  | 37.86   | 0.25              | 0.41   | 0.48    | 0.29               | 0.45   | 0.53    |
| 900            | 37.03          | 37.15  | 37.18   | 0.31              | 0.50   | 0.59    | 0.34               | 0.53   | 0.63    |
| 1000           | 38.23          | 38.85  | 39.27   | 0.42              | 0.64   | 0.77    | 0.44               | 0.67   | 0.80    |
| 1100           | 40.37          | 36.59  | 33.93   | 0.63              | 0.93   | 1.14    | 0.64               | 0.94   | 1.15    |
| 1130           | 33.36          | 30.43  | 28.34   | 0.74              | 1.07   | 1.33    | 0.73               | 1.08   | 1.32    |
| 1150           | 29.40          | 26.88  | 25.04   | 0.83              | 1.20   | 1.50    | 0.82               | 1.21   | 1.48    |
| 1190           | 22.72          | 20.69  | 19.18   | 1.11              | 1.59   | 2.00    | 1.06               | 1.54   | 1.92    |
| 1400           | 3.00           | 3.07   | 3.13    | 12.47             | 14.17  | 15.25   | 10.66              | 12.30  | 13.44   |
| 1450           | 2.10           | 2.32   | 2.46    | 16.75             | 16.71  | 16.60   | 14.76              | 15.50  | 15.89   |
| 1500           | 1.67           | 1.93   | 2.09    | 17.33             | 16.29  | 15.68   | 16.96              | 16.54  | 16.18   |
| 1560           | 1.39           | 1.67   | 1.83    | 16.03             | 14.93  | 14.35   | 16.97              | 15.83  | 15.24   |
| 1600           | 1.27           | 1.55   | 1.71    | 15.05             | 14.10  | 13.63   | 16.00              | 14.94  | 14.40   |
| 1700           | 1.07           | 1.34   | 1.47    | 13.53             | 13.03  | 12.85   | 14.22              | 13.64  | 13.44   |
| 1800           | 0.91           | 1.15   | 1.26    | 13.29             | 13.14  | 13.18   | 13.78              | 13.59  | 13.64   |
| 1900           | 0.75           | 0.97   | 1.07    | 14.14             | 14.34  | 14.50   | 14.57              | 14.73  | 14.90   |
| 2000           | 0.60           | 0.81   | 0.91    | 16.01             | 16.56  | 16.80   | 16.29              | 16.80  | 17.02   |
| 2100           | 0.47           | 0.68   | 0.78    | 19.22             | 20.09  | 20.48   | 19.51              | 20.35  | 20.69   |
| 2200           | 0.38           | 0.59   | 0.68    | 24.12             | 25.32  | 26.08   | 23.81              | 24.93  | 25.54   |
| 2300           | 0.32           | 0.54   | 0.63    | 30.14             | 30.11  | 30.00   | 28.04              | 28.16  | 28.29   |
| 2400           | 0.30           | 0.51   | 0.60    | 25.35             | 24.21  | 23.78   | 24.07              | 23.35  | 23.15   |
| 2500           | 0.28           | 0.50   | 0.59    | 21.53             | 20.75  | 20.45   | 20.85              | 20.32  | 20.18   |
| 2600           | 0.28           | 0.50   | 0.59    | 18.60             | 18.19  | 17.95   | 18.22              | 17.96  | 17.87   |
| 2700           | 0.28           | 0.51   | 0.60    | 16.98             | 16.77  | 16.60   | 16.79              | 16.70  | 16.65   |
| 2800           | 0.28           | 0.51   | 0.60    | 15.89             | 15.74  | 15.65   | 15.78              | 15.77  | 15.74   |
| 2900           | 0.27           | 0.51   | 0.60    | 15.28             | 15.20  | 15.13   | 15.22              | 15.27  | 15.29   |
| 3000           | 0.26           | 0.50   | 0.59    | 14.94             | 14.95  | 14.90   | 14.90              | 15.03  | 15.05   |
| 3100           | 0.26           | 0.49   | 0.59    | 14.89             | 14.94  | 14.89   | 14.94              | 15.12  | 15.15   |
| 3200           | 0.23           | 0.47   | 0.56    | 15.06             | 15.09  | 15.11   | 15.14              | 15.32  | 15.39   |
| 3300           | 0.20           | 0.45   | 0.54    | 15.40             | 15.45  | 15.44   | 15.49              | 15.72  | 15.79   |
| 3400           | 0.17           | 0.42   | 0.52    | 16.01             | 16.03  | 15.98   | 16.12              | 16.37  | 16.36   |
| 3500           | 0.15           | 0.40   | 0.50    | 16.69             | 16.75  | 16.64   | 16.78              | 17.07  | 17.02   |
| 3600           | 0.12           | 0.37   | 0.48    | 17.68             | 17.82  | 17.62   | 17.90              | 18.29  | 18.12   |
| 3700           | 0.09           | 0.34   | 0.45    | 18.76             | 19.00  | 18.76   | 19.09              | 19.58  | 19.42   |
| 3800           | 0.06           | 0.32   | 0.42    | 20.19             | 20.41  | 20.19   | 20.92              | 21.47  | 21.31   |
| 3900           | 0.04           | 0.30   | 0.41    | 22.10             | 22.28  | 22.07   | 23.26              | 23.95  | 23.85   |
| 4000           | 0.03           | 0.29   | 0.40    | 24.75             | 24.89  | 24.56   | 26.94              | 27.92  | 27.72   |
| 4100           | 0.01           | 0.28   | 0.39    | 27.41             | 27.31  | 27.29   | 31.44              | 33.17  | 33.00   |
| 4200           | 0.02           | 0.28   | 0.39    | 27.85             | 27.67  | 28.14   | 32.43              | 33.37  | 34.57   |
| 4300           | 0.01           | 0.28   | 0.39    | 24.78             | 24.84  | 25.32   | 26.82              | 27.17  | 27.46   |
| 4400           | 0.01           | 0.28   | 0.40    | 22.54             | 22.52  | 22.82   | 23.43              | 23.51  | 23.61   |
| 4500           | 0.02           | 0.30   | 0.41    | 20.18             | 20.08  | 20.35   | 20.69              | 20.71  | 20.79   |
| 4600           | 0.05           | 0.33   | 0.44    | 18.03             | 17.90  | 18.20   | 18.36              | 18.29  | 18.49   |
| 5000           | 0.17           | 0.47   | 0.58    | 12.97             | 13.16  | 13.39   | 13.14              | 13.40  | 13.57   |
| 5200           | 0.24           | 0.54   | 0.66    | 11.39             | 11.60  | 11.84   | 11.58              | 11.85  | 12.06   |
| 5300           | 0.29           | 0.60   | 0.72    | 10.69             | 10.94  | 11.16   | 10.85              | 11.14  | 11.36   |
| 5400           | 0.34           | 0.65   | 0.78    | 10.04             | 10.35  | 10.56   | 10.25              | 10.56  | 10.80   |
| 5500           | 0.39           | 0.70   | 0.83    | 9.52              | 9.86   | 10.05   | 9.73               | 10.08  | 10.29   |
| 5600           | 0.44           | 0.76   | 0.88    | 9.07              | 9.40   | 9.64    | 9.34               | 9.68   | 9.96    |
| 5800           | 0.51           | 0.84   | 0.97    | 8.57              | 8.83   | 9.09    | 8.68               | 8.98   | 9.28    |
| 6000           | 0.59           | 0.94   | 1.08    | 7.97              | 8.23   | 8.55    | 8.05               | 8.34   | 8.66    |

## Typical Performance Data

| FREQ.<br><br>(MHz) | GROUP DELAY |        |         |
|--------------------|-------------|--------|---------|
|                    | (nsec)      |        |         |
|                    | @-55°C      | @+25°C | @+100°C |
| 1600               | 0.85        | 0.81   | 0.78    |
| 1640               | 0.76        | 0.73   | 0.70    |
| 1680               | 0.69        | 0.66   | 0.64    |
| 1700               | 0.65        | 0.62   | 0.60    |
| 1760               | 0.59        | 0.57   | 0.55    |
| 1800               | 0.55        | 0.53   | 0.52    |
| 1840               | 0.52        | 0.50   | 0.49    |
| 1880               | 0.48        | 0.47   | 0.46    |
| 2000               | 0.41        | 0.40   | 0.39    |
| 2100               | 0.36        | 0.36   | 0.35    |
| 2200               | 0.33        | 0.32   | 0.31    |
| 2300               | 0.29        | 0.29   | 0.28    |
| 2400               | 0.26        | 0.26   | 0.25    |
| 2500               | 0.24        | 0.23   | 0.23    |
| 2600               | 0.22        | 0.21   | 0.21    |
| 2700               | 0.20        | 0.19   | 0.19    |
| 2800               | 0.18        | 0.18   | 0.17    |
| 2900               | 0.17        | 0.16   | 0.16    |
| 3000               | 0.16        | 0.15   | 0.15    |
| 3100               | 0.15        | 0.14   | 0.14    |
| 3200               | 0.14        | 0.14   | 0.13    |
| 3300               | 0.13        | 0.13   | 0.13    |
| 3400               | 0.13        | 0.12   | 0.12    |
| 3500               | 0.12        | 0.12   | 0.11    |
| 3600               | 0.12        | 0.11   | 0.11    |
| 3700               | 0.11        | 0.11   | 0.11    |
| 3800               | 0.11        | 0.11   | 0.10    |
| 3900               | 0.11        | 0.10   | 0.10    |
| 4000               | 0.10        | 0.10   | 0.10    |
| 4100               | 0.10        | 0.10   | 0.10    |
| 4200               | 0.10        | 0.10   | 0.09    |
| 4300               | 0.10        | 0.09   | 0.09    |
| 4400               | 0.09        | 0.09   | 0.09    |
| 4500               | 0.09        | 0.09   | 0.08    |
| 4600               | 0.09        | 0.08   | 0.08    |
| 4700               | 0.08        | 0.08   | 0.08    |
| 4800               | 0.08        | 0.08   | 0.08    |
| 4900               | 0.08        | 0.08   | 0.07    |
| 5000               | 0.08        | 0.08   | 0.07    |
| 5500               | 0.06        | 0.06   | 0.06    |
| 6000               | 0.06        | 0.06   | 0.05    |