

## 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                 | 76.84          | 73.22  | 82.16   | 0.10              | 0.15   | 0.20    | 0.11               | 0.15   | 0.22    |
| 20                 | 72.45          | 73.68  | 72.61   | 0.12              | 0.17   | 0.23    | 0.13               | 0.19   | 0.25    |
| 80                 | 61.10          | 61.13  | 61.05   | 0.18              | 0.25   | 0.34    | 0.20               | 0.27   | 0.37    |
| 100                | 59.18          | 59.25  | 59.21   | 0.20              | 0.27   | 0.36    | 0.22               | 0.29   | 0.39    |
| 150                | 55.86          | 55.86  | 55.97   | 0.24              | 0.32   | 0.42    | 0.26               | 0.34   | 0.45    |
| 200                | 53.50          | 53.52  | 53.62   | 0.28              | 0.36   | 0.47    | 0.30               | 0.38   | 0.49    |
| 250                | 51.71          | 51.75  | 51.80   | 0.31              | 0.40   | 0.51    | 0.32               | 0.41   | 0.53    |
| 300                | 50.20          | 50.22  | 50.26   | 0.34              | 0.43   | 0.54    | 0.35               | 0.44   | 0.56    |
| 350                | 48.93          | 48.97  | 49.01   | 0.36              | 0.46   | 0.58    | 0.37               | 0.47   | 0.59    |
| 400                | 47.83          | 47.90  | 47.94   | 0.37              | 0.48   | 0.60    | 0.38               | 0.49   | 0.62    |
| 450                | 46.89          | 46.95  | 47.03   | 0.39              | 0.50   | 0.63    | 0.39               | 0.50   | 0.63    |
| 500                | 46.04          | 46.08  | 46.19   | 0.40              | 0.51   | 0.64    | 0.40               | 0.52   | 0.65    |
| 600                | 44.59          | 44.63  | 44.74   | 0.42              | 0.54   | 0.67    | 0.42               | 0.54   | 0.68    |
| 700                | 43.37          | 43.45  | 43.55   | 0.43              | 0.56   | 0.69    | 0.43               | 0.55   | 0.69    |
| 800                | 42.34          | 42.38  | 42.48   | 0.44              | 0.57   | 0.70    | 0.44               | 0.56   | 0.69    |
| 900                | 41.42          | 41.48  | 41.57   | 0.45              | 0.57   | 0.71    | 0.44               | 0.57   | 0.70    |
| 1000               | 40.60          | 40.66  | 40.74   | 0.44              | 0.57   | 0.70    | 0.44               | 0.56   | 0.69    |
| 1100               | 39.86          | 39.90  | 39.99   | 0.44              | 0.56   | 0.69    | 0.43               | 0.55   | 0.68    |
| 1200               | 39.17          | 39.21  | 39.30   | 0.43              | 0.56   | 0.68    | 0.42               | 0.54   | 0.67    |
| 1300               | 38.55          | 38.58  | 38.66   | 0.42              | 0.55   | 0.67    | 0.42               | 0.53   | 0.65    |
| 1400               | 37.97          | 38.01  | 38.09   | 0.41              | 0.54   | 0.65    | 0.41               | 0.52   | 0.64    |
| 1500               | 37.49          | 37.54  | 37.62   | 0.40              | 0.52   | 0.64    | 0.40               | 0.51   | 0.63    |
| 1600               | 37.13          | 37.20  | 37.31   | 0.39              | 0.52   | 0.63    | 0.39               | 0.51   | 0.62    |
| 1700               | 37.01          | 37.13  | 37.31   | 0.39              | 0.52   | 0.63    | 0.39               | 0.51   | 0.63    |
| 1800               | 37.35          | 37.59  | 37.91   | 0.39              | 0.52   | 0.65    | 0.40               | 0.52   | 0.64    |
| 1900               | 38.67          | 39.20  | 39.88   | 0.41              | 0.55   | 0.67    | 0.42               | 0.54   | 0.68    |
| 2000               | 42.76          | 44.08  | 45.31   | 0.44              | 0.59   | 0.73    | 0.45               | 0.59   | 0.74    |
| 2100               | 45.27          | 41.78  | 38.42   | 0.50              | 0.67   | 0.84    | 0.52               | 0.68   | 0.85    |
| 2200               | 32.32          | 30.48  | 28.51   | 0.61              | 0.81   | 1.02    | 0.63               | 0.82   | 1.04    |
| 2320               | 22.61          | 21.31  | 19.82   | 0.87              | 1.13   | 1.45    | 0.90               | 1.16   | 1.49    |
| 2500               | 11.44          | 10.54  | 9.55    | 2.06              | 2.66   | 3.49    | 2.13               | 2.75   | 3.62    |
| 2700               | 3.57           | 3.48   | 3.44    | 8.51              | 10.18  | 12.31   | 8.80               | 10.56  | 12.84   |
| 2750               | 2.72           | 2.78   | 2.87    | 11.82             | 13.75  | 16.14   | 12.27              | 14.32  | 16.87   |
| 2900               | 1.66           | 1.85   | 2.06    | 27.74             | 30.76  | 32.29   | 28.87              | 30.02  | 28.65   |
| 2960               | 1.49           | 1.70   | 1.91    | 44.46             | 43.74  | 33.12   | 34.07              | 31.51  | 28.25   |
| 3000               | 1.42           | 1.62   | 1.83    | 41.14             | 37.28  | 30.67   | 32.37              | 30.45  | 27.50   |
| 3060               | 1.33           | 1.52   | 1.73    | 33.61             | 31.92  | 27.62   | 31.08              | 29.62  | 26.52   |
| 3100               | 1.28           | 1.47   | 1.68    | 31.82             | 29.97  | 26.12   | 31.00              | 29.17  | 25.82   |
| 3160               | 1.21           | 1.41   | 1.61    | 29.96             | 27.72  | 24.31   | 31.39              | 28.44  | 24.72   |
| 3200               | 1.18           | 1.37   | 1.57    | 28.82             | 26.45  | 23.32   | 31.20              | 27.67  | 23.98   |
| 3260               | 1.13           | 1.32   | 1.52    | 27.23             | 24.88  | 22.12   | 29.90              | 26.26  | 22.86   |
| 3300               | 1.10           | 1.29   | 1.49    | 26.24             | 24.00  | 21.48   | 28.69              | 25.32  | 22.23   |
| 3360               | 1.07           | 1.26   | 1.44    | 24.92             | 22.89  | 20.72   | 26.87              | 24.01  | 21.38   |
| 3400               | 1.05           | 1.23   | 1.42    | 24.17             | 22.29  | 20.32   | 25.81              | 23.25  | 20.90   |
| 3460               | 1.02           | 1.20   | 1.39    | 23.26             | 21.59  | 19.91   | 24.48              | 22.32  | 20.35   |
| 3500               | 1.00           | 1.19   | 1.37    | 22.79             | 21.26  | 19.71   | 23.74              | 21.81  | 20.04   |
| 3560               | 0.98           | 1.16   | 1.34    | 22.22             | 20.88  | 19.55   | 22.81              | 21.19  | 19.71   |
| 3600               | 0.96           | 1.15   | 1.32    | 21.95             | 20.72  | 19.52   | 22.33              | 20.88  | 19.55   |
| 3660               | 0.94           | 1.12   | 1.30    | 21.67             | 20.59  | 19.56   | 21.78              | 20.55  | 19.42   |
| 3700               | 0.93           | 1.11   | 1.28    | 21.58             | 20.58  | 19.66   | 21.50              | 20.37  | 19.38   |
| 4000               | 0.86           | 1.03   | 1.18    | 22.43             | 21.84  | 21.65   | 21.09              | 20.46  | 20.16   |
| 5000               | 0.72           | 0.88   | 1.01    | 40.45             | 44.00  | 38.12   | 32.31              | 32.73  | 32.43   |
| 6000               | 0.68           | 0.84   | 0.96    | 34.74             | 31.59  | 28.96   | 27.66              | 25.69  | 24.16   |
| 7000               | 0.68           | 0.84   | 0.96    | 42.05             | 41.94  | 36.88   | 25.13              | 24.26  | 24.02   |
| 8000               | 0.68           | 0.86   | 0.97    | 27.03             | 26.03  | 27.86   | 25.41              | 24.73  | 26.29   |
| 10000              | 0.86           | 1.06   | 1.22    | 15.08             | 14.99  | 14.46   | 14.88              | 14.81  | 14.38   |
| 12000              | 0.98           | 1.21   | 1.38    | 13.65             | 13.86  | 13.55   | 14.07              | 14.29  | 14.00   |
| 14000              | 1.01           | 1.29   | 1.46    | 14.15             | 13.89  | 14.09   | 13.72              | 13.37  | 13.65   |
| 15000              | 1.00           | 1.27   | 1.45    | 16.16             | 16.80  | 17.66   | 16.32              | 17.10  | 18.65   |
| 16000              | 1.12           | 1.47   | 1.78    | 17.93             | 16.96  | 15.33   | 23.17              | 21.10  | 18.22   |

## Typical Performance Data

| FREQ.<br><br>(MHz) | GROUP DELAY |        |         |
|--------------------|-------------|--------|---------|
|                    | (nsec)      |        |         |
|                    | @-55°C      | @+25°C | @+125°C |
| 2900               | 0.84        | 0.81   | 0.78    |
| 3100               | 0.64        | 0.62   | 0.61    |
| 3300               | 0.53        | 0.52   | 0.51    |
| 3500               | 0.46        | 0.46   | 0.45    |
| 3700               | 0.41        | 0.41   | 0.40    |
| 4000               | 0.37        | 0.37   | 0.37    |
| 4300               | 0.34        | 0.33   | 0.33    |
| 4600               | 0.31        | 0.31   | 0.31    |
| 4900               | 0.29        | 0.29   | 0.29    |
| 5200               | 0.28        | 0.27   | 0.28    |
| 5500               | 0.26        | 0.26   | 0.26    |
| 5800               | 0.25        | 0.25   | 0.25    |
| 6100               | 0.25        | 0.24   | 0.25    |
| 6400               | 0.24        | 0.24   | 0.24    |
| 6700               | 0.23        | 0.23   | 0.23    |
| 7000               | 0.23        | 0.23   | 0.23    |
| 7300               | 0.22        | 0.22   | 0.23    |
| 7600               | 0.22        | 0.22   | 0.22    |
| 7900               | 0.22        | 0.22   | 0.22    |
| 8200               | 0.22        | 0.22   | 0.22    |
| 8500               | 0.21        | 0.21   | 0.22    |
| 8800               | 0.21        | 0.21   | 0.22    |
| 9100               | 0.21        | 0.21   | 0.21    |
| 9400               | 0.21        | 0.21   | 0.21    |
| 9700               | 0.21        | 0.21   | 0.21    |
| 10000              | 0.21        | 0.21   | 0.21    |
| 10300              | 0.21        | 0.21   | 0.21    |
| 10600              | 0.20        | 0.21   | 0.21    |
| 10900              | 0.20        | 0.20   | 0.21    |
| 11200              | 0.20        | 0.20   | 0.21    |
| 11500              | 0.20        | 0.20   | 0.21    |
| 11800              | 0.20        | 0.20   | 0.21    |
| 12100              | 0.20        | 0.20   | 0.21    |
| 12400              | 0.20        | 0.20   | 0.21    |
| 12700              | 0.21        | 0.21   | 0.21    |
| 13000              | 0.21        | 0.21   | 0.21    |
| 13500              | 0.21        | 0.21   | 0.21    |
| 14000              | 0.21        | 0.21   | 0.21    |
| 14500              | 0.21        | 0.21   | 0.22    |
| 15000              | 0.22        | 0.22   | 0.22    |
| 16000              | 0.23        | 0.24   | 0.24    |