

## Typical Performance Data

| FREQ. | INSERTION LOSS |        |         | INPUT RETURN LOSS |        |         | OUTPUT RETURN LOSS |        |         |
|-------|----------------|--------|---------|-------------------|--------|---------|--------------------|--------|---------|
| (MHz) | (dB)           |        |         | (dB)              |        |         | (dB)               |        |         |
|       | @-55°C         | @+25°C | @+100°C | @-55°C            | @+25°C | @+100°C | @-55°C             | @+25°C | @+100°C |
| 10    | 0.39           | 0.46   | 0.51    | 47.95             | 48.42  | 41.51   | 47.20              | 49.72  | 41.69   |
| 20    | 0.39           | 0.47   | 0.51    | 45.17             | 48.39  | 41.51   | 46.21              | 48.26  | 41.18   |
| 100   | 0.39           | 0.50   | 0.54    | 40.48             | 42.06  | 40.25   | 40.72              | 41.58  | 38.69   |
| 150   | 0.40           | 0.51   | 0.55    | 38.94             | 38.52  | 38.39   | 39.02              | 38.14  | 36.75   |
| 200   | 0.41           | 0.52   | 0.57    | 37.57             | 35.85  | 35.29   | 37.62              | 35.58  | 34.63   |
| 250   | 0.41           | 0.53   | 0.59    | 36.71             | 33.86  | 32.55   | 36.30              | 33.66  | 32.50   |
| 300   | 0.41           | 0.54   | 0.60    | 35.68             | 32.24  | 30.34   | 34.81              | 32.07  | 30.63   |
| 350   | 0.42           | 0.56   | 0.62    | 34.12             | 30.79  | 28.76   | 33.35              | 30.78  | 29.18   |
| 400   | 0.42           | 0.57   | 0.63    | 32.20             | 29.61  | 27.67   | 31.89              | 29.63  | 28.09   |
| 500   | 0.44           | 0.59   | 0.66    | 28.78             | 27.67  | 26.34   | 28.99              | 27.69  | 26.49   |
| 600   | 0.46           | 0.62   | 0.70    | 26.60             | 25.99  | 25.16   | 26.90              | 26.17  | 25.30   |
| 650   | 0.46           | 0.63   | 0.71    | 25.87             | 25.28  | 24.49   | 26.16              | 25.50  | 24.78   |
| 700   | 0.47           | 0.64   | 0.73    | 25.32             | 24.65  | 23.95   | 25.37              | 24.83  | 24.19   |
| 750   | 0.48           | 0.66   | 0.75    | 24.89             | 24.15  | 23.58   | 24.66              | 24.19  | 23.65   |
| 800   | 0.49           | 0.67   | 0.76    | 24.33             | 23.65  | 23.19   | 24.06              | 23.66  | 23.20   |
| 900   | 0.52           | 0.71   | 0.80    | 23.02             | 22.63  | 22.39   | 22.99              | 22.73  | 22.38   |
| 1000  | 0.54           | 0.74   | 0.85    | 21.92             | 21.73  | 21.70   | 22.11              | 21.93  | 21.69   |
| 1250  | 0.63           | 0.85   | 0.97    | 20.35             | 20.27  | 20.54   | 20.56              | 20.43  | 20.48   |
| 1500  | 0.76           | 1.02   | 1.15    | 19.35             | 19.51  | 20.09   | 19.62              | 19.62  | 19.81   |
| 1750  | 0.98           | 1.26   | 1.42    | 19.53             | 19.93  | 20.37   | 19.58              | 19.71  | 19.71   |
| 1900  | 1.17           | 1.49   | 1.67    | 20.47             | 20.69  | 21.07   | 20.21              | 20.25  | 20.16   |
| 2000  | 1.35           | 1.68   | 1.87    | 21.24             | 21.58  | 21.84   | 20.68              | 20.76  | 20.62   |
| 2200  | 1.85           | 2.23   | 2.45    | 23.98             | 24.21  | 24.08   | 22.30              | 22.15  | 21.92   |
| 2400  | 2.63           | 3.07   | 3.33    | 28.14             | 26.74  | 25.91   | 22.84              | 22.56  | 22.57   |
| 2600  | 3.79           | 4.28   | 4.58    | 25.27             | 24.47  | 23.91   | 21.06              | 20.88  | 21.00   |
| 2800  | 5.39           | 5.95   | 6.28    | 21.40             | 21.33  | 21.15   | 18.61              | 18.66  | 18.86   |
| 3000  | 7.47           | 8.09   | 8.46    | 19.34             | 19.37  | 19.45   | 16.97              | 17.19  | 17.43   |
| 3200  | 10.05          | 10.72  | 11.13   | 18.13             | 18.60  | 18.85   | 16.11              | 16.39  | 16.66   |
| 3480  | 14.63          | 15.40  | 15.87   | 18.17             | 18.69  | 19.09   | 15.93              | 16.28  | 16.51   |
| 3600  | 17.09          | 17.92  | 18.42   | 18.23             | 18.82  | 19.27   | 16.24              | 16.53  | 16.77   |
| 3800  | 22.35          | 23.23  | 23.72   | 18.75             | 19.40  | 19.95   | 16.67              | 16.97  | 17.13   |
| 4000  | 29.68          | 29.49  | 29.10   | 19.45             | 20.00  | 20.52   | 17.51              | 17.69  | 17.87   |
| 4200  | 28.88          | 27.61  | 26.89   | 20.14             | 20.67  | 21.18   | 18.27              | 18.39  | 18.52   |
| 4400  | 23.98          | 23.56  | 23.27   | 20.83             | 21.40  | 22.02   | 19.18              | 19.25  | 19.30   |
| 4600  | 21.12          | 21.03  | 20.94   | 21.76             | 22.13  | 22.52   | 20.45              | 20.24  | 20.32   |
| 4800  | 19.33          | 19.40  | 19.42   | 22.45             | 22.93  | 23.27   | 21.32              | 20.97  | 20.94   |
| 5000  | 18.12          | 18.29  | 18.37   | 23.32             | 23.53  | 23.71   | 22.51              | 21.98  | 21.90   |
| 5200  | 17.28          | 17.52  | 17.63   | 24.30             | 24.20  | 23.95   | 23.43              | 22.56  | 22.59   |
| 5400  | 16.67          | 16.95  | 17.10   | 25.31             | 24.92  | 24.29   | 23.73              | 22.93  | 23.00   |
| 5600  | 16.23          | 16.55  | 16.71   | 26.19             | 24.99  | 23.75   | 23.85              | 23.09  | 23.35   |
| 5800  | 15.91          | 16.25  | 16.44   | 27.44             | 25.30  | 23.71   | 23.48              | 22.92  | 23.32   |
| 6000  | 15.68          | 16.04  | 16.25   | 27.45             | 24.82  | 22.89   | 22.84              | 22.64  | 23.16   |
| 6200  | 15.52          | 15.90  | 16.12   | 27.10             | 24.20  | 22.15   | 22.27              | 22.25  | 23.09   |
| 6400  | 15.41          | 15.80  | 16.04   | 26.14             | 23.23  | 21.33   | 21.32              | 21.61  | 22.50   |
| 6600  | 15.34          | 15.75  | 16.00   | 25.43             | 22.48  | 20.57   | 20.66              | 21.24  | 22.11   |
| 6800  | 15.30          | 15.73  | 15.98   | 23.63             | 21.30  | 19.69   | 20.21              | 20.85  | 21.89   |
| 7000  | 15.29          | 15.73  | 15.99   | 22.22             | 20.30  | 19.12   | 19.64              | 20.47  | 21.47   |
| 7200  | 15.30          | 15.76  | 16.02   | 21.01             | 19.52  | 18.53   | 19.29              | 20.25  | 21.24   |
| 7400  | 15.33          | 15.80  | 16.06   | 19.33             | 18.57  | 17.91   | 19.01              | 20.05  | 21.05   |
| 7600  | 15.38          | 15.85  | 16.11   | 18.18             | 17.87  | 17.61   | 18.87              | 19.83  | 20.79   |
| 7800  | 15.43          | 15.91  | 16.17   | 17.27             | 17.29  | 17.28   | 18.82              | 19.80  | 20.65   |
| 8000  | 15.49          | 15.98  | 16.23   | 16.40             | 16.74  | 16.91   | 18.63              | 19.67  | 20.37   |
| 8200  | 15.55          | 16.04  | 16.30   | 15.71             | 16.28  | 16.63   | 18.61              | 19.63  | 20.18   |
| 8400  | 15.60          | 16.09  | 16.36   | 15.44             | 15.98  | 16.41   | 18.95              | 19.66  | 20.28   |
| 8500  | 15.63          | 16.12  | 16.40   | 15.33             | 15.87  | 16.31   | 19.03              | 19.60  | 20.13   |
| 9000  | 15.71          | 16.23  | 16.54   | 14.99             | 15.42  | 15.98   | 19.61              | 19.64  | 19.89   |
| 9500  | 15.73          | 16.28  | 16.59   | 15.16             | 15.63  | 16.50   | 19.80              | 19.59  | 19.60   |
| 10000 | 15.66          | 16.22  | 16.53   | 15.37             | 16.34  | 17.89   | 20.23              | 20.02  | 20.13   |
| 10500 | 15.46          | 16.00  | 16.30   | 16.21             | 17.84  | 20.07   | 20.35              | 20.66  | 21.11   |
| 11200 | 14.84          | 15.35  | 15.65   | 18.33             | 19.55  | 20.66   | 20.38              | 21.21  | 22.02   |

## Typical Performance Data

| FREQ. | GROUP DELAY |        |         |
|-------|-------------|--------|---------|
| (MHz) | (nsec)      |        |         |
|       | @-55°C      | @+25°C | @+100°C |
| 10    | 0.26        | 0.27   | 0.27    |
| 20    | 0.26        | 0.27   | 0.27    |
| 40    | 0.26        | 0.27   | 0.27    |
| 60    | 0.27        | 0.27   | 0.27    |
| 100   | 0.27        | 0.27   | 0.27    |
| 150   | 0.27        | 0.27   | 0.27    |
| 200   | 0.27        | 0.27   | 0.27    |
| 250   | 0.27        | 0.27   | 0.27    |
| 300   | 0.27        | 0.27   | 0.26    |
| 350   | 0.27        | 0.27   | 0.26    |
| 400   | 0.27        | 0.27   | 0.26    |
| 450   | 0.27        | 0.27   | 0.26    |
| 500   | 0.27        | 0.27   | 0.26    |
| 550   | 0.27        | 0.27   | 0.27    |
| 600   | 0.27        | 0.27   | 0.27    |
| 650   | 0.27        | 0.27   | 0.27    |
| 700   | 0.27        | 0.27   | 0.27    |
| 750   | 0.27        | 0.27   | 0.27    |
| 800   | 0.27        | 0.27   | 0.27    |
| 850   | 0.27        | 0.27   | 0.27    |
| 900   | 0.27        | 0.27   | 0.27    |
| 950   | 0.27        | 0.27   | 0.27    |
| 1000  | 0.27        | 0.27   | 0.27    |
| 1050  | 0.28        | 0.28   | 0.27    |
| 1100  | 0.28        | 0.28   | 0.27    |
| 1200  | 0.28        | 0.28   | 0.28    |
| 1250  | 0.28        | 0.28   | 0.28    |
| 1300  | 0.28        | 0.28   | 0.28    |
| 1350  | 0.29        | 0.28   | 0.28    |
| 1400  | 0.29        | 0.29   | 0.28    |
| 1450  | 0.29        | 0.29   | 0.29    |
| 1500  | 0.29        | 0.29   | 0.29    |
| 1550  | 0.29        | 0.29   | 0.29    |
| 1600  | 0.30        | 0.30   | 0.29    |
| 1650  | 0.30        | 0.30   | 0.30    |
| 1700  | 0.30        | 0.30   | 0.30    |
| 1750  | 0.31        | 0.30   | 0.30    |
| 1760  | 0.31        | 0.31   | 0.30    |
| 1770  | 0.31        | 0.31   | 0.30    |
| 1780  | 0.31        | 0.31   | 0.30    |
| 1790  | 0.31        | 0.31   | 0.31    |
| 1800  | 0.31        | 0.31   | 0.31    |
| 1810  | 0.31        | 0.31   | 0.31    |
| 1820  | 0.31        | 0.31   | 0.31    |
| 1830  | 0.31        | 0.31   | 0.31    |
| 1840  | 0.31        | 0.31   | 0.31    |
| 1850  | 0.31        | 0.31   | 0.31    |
| 1860  | 0.31        | 0.31   | 0.31    |
| 1870  | 0.31        | 0.31   | 0.31    |
| 1880  | 0.32        | 0.31   | 0.31    |
| 1900  | 0.32        | 0.31   | 0.31    |