

## Typical Performance Data (Low Frequency)

### Definitions:

| STATE | V <sub>C1</sub> | V <sub>C2</sub> | MODE       |
|-------|-----------------|-----------------|------------|
| 1     | LOW             | LOW             | RF-OUT1 ON |
| 2     | HIGH            | LOW             | RF-OUT2 ON |
| 3     | LOW             | HIGH            | RF-OUT3 ON |
| 4     | HIGH            | HIGH            | RF-OUT4 ON |

TEST CONDITIONS: V<sub>DD</sub> = +3.3V, V<sub>EE</sub> = -3.3V @ Temperature = +25°C

| FREQ  | Insertion Loss |                |                |                | Isolation      |                |                |                |                   |                   |                   |                   |                   |                   |
|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|       | RFC - RF-OUT 1 | RFC - RF-OUT 2 | RFC - RF-OUT 3 | RFC - RF-OUT 4 | RFC - RF-OUT 1 | RFC - RF-OUT 2 | RFC - RF-OUT 3 | RFC - RF-OUT 4 | RF-OUT1 - RF-OUT2 | RF-OUT1 - RF-OUT3 | RF-OUT1 - RF-OUT4 | RF-OUT2 - RF-OUT3 | RF-OUT2 - RF-OUT4 | RF-OUT3 - RF-OUT4 |
| (MHz) | (dB)           | (dB)           | (dB)           | (dB)           | (dB)           | (dB)           | (dB)           | (dB)           | (dB)              | (dB)              | (dB)              | (dB)              | (dB)              | (dB)              |
| 0.009 | 0.89           | 0.89           | 0.89           | 0.88           | 79.14          | 78.02          | 79.23          | 80.29          | 80.79             | 80.65             | 81.10             | 80.40             | 81.84             | 80.35             |
| 0.25  | 0.89           | 0.89           | 0.89           | 0.88           | 79.69          | 80.18          | 80.16          | 79.99          | 81.10             | 81.52             | 81.45             | 81.40             | 81.73             | 81.19             |
| 0.5   | 0.89           | 0.89           | 0.88           | 0.88           | 79.68          | 79.93          | 79.84          | 79.71          | 80.89             | 81.41             | 81.40             | 81.65             | 81.51             | 80.82             |
| 0.75  | 0.89           | 0.89           | 0.89           | 0.88           | 79.69          | 79.91          | 79.90          | 79.74          | 80.95             | 81.50             | 81.16             | 81.19             | 81.54             | 80.99             |
| 1     | 0.89           | 0.89           | 0.89           | 0.88           | 79.65          | 79.69          | 79.80          | 79.72          | 80.91             | 81.49             | 81.52             | 81.65             | 81.66             | 80.96             |
| 2     | 0.89           | 0.89           | 0.88           | 0.88           | 79.34          | 79.60          | 79.83          | 79.56          | 80.72             | 81.37             | 81.34             | 81.34             | 81.38             | 80.76             |
| 3     | 0.88           | 0.89           | 0.88           | 0.88           | 79.29          | 79.66          | 79.67          | 79.37          | 80.45             | 81.35             | 81.39             | 81.29             | 81.42             | 80.71             |
| 4     | 0.88           | 0.89           | 0.88           | 0.88           | 79.12          | 79.54          | 79.64          | 79.19          | 80.36             | 81.27             | 81.44             | 81.28             | 81.22             | 80.32             |
| 5     | 0.88           | 0.88           | 0.88           | 0.88           | 78.92          | 79.39          | 79.51          | 79.12          | 80.17             | 81.18             | 81.44             | 81.22             | 81.17             | 80.00             |
| 6     | 0.88           | 0.88           | 0.88           | 0.88           | 78.73          | 79.30          | 79.46          | 78.84          | 79.98             | 81.13             | 81.38             | 81.03             | 81.13             | 79.83             |
| 7     | 0.88           | 0.88           | 0.88           | 0.87           | 78.62          | 79.21          | 79.27          | 78.73          | 79.72             | 81.03             | 81.17             | 80.84             | 80.90             | 79.64             |
| 8     | 0.88           | 0.88           | 0.88           | 0.88           | 78.47          | 79.02          | 79.11          | 78.59          | 79.54             | 81.08             | 81.28             | 80.90             | 80.87             | 79.43             |
| 9     | 0.88           | 0.88           | 0.88           | 0.87           | 78.27          | 78.88          | 78.98          | 78.44          | 79.36             | 80.81             | 81.11             | 80.71             | 80.63             | 79.17             |
| 10    | 0.88           | 0.88           | 0.88           | 0.87           | 78.17          | 78.72          | 78.83          | 78.22          | 79.19             | 80.66             | 80.95             | 80.46             | 80.70             | 79.12             |
| 20    | 0.88           | 0.88           | 0.88           | 0.87           | 76.58          | 77.27          | 77.37          | 76.70          | 77.53             | 79.22             | 79.66             | 79.03             | 79.24             | 77.10             |
| 30    | 0.87           | 0.88           | 0.88           | 0.87           | 75.60          | 76.24          | 76.38          | 75.66          | 76.38             | 78.15             | 78.77             | 78.00             | 78.22             | 75.84             |
| 40    | 0.87           | 0.88           | 0.88           | 0.87           | 75.02          | 75.59          | 75.73          | 75.11          | 75.64             | 77.55             | 78.39             | 77.49             | 77.60             | 75.04             |
| 50    | 0.87           | 0.88           | 0.88           | 0.87           | 74.75          | 75.24          | 75.43          | 74.91          | 75.38             | 77.18             | 78.15             | 77.14             | 77.32             | 74.80             |
| 60    | 0.87           | 0.88           | 0.88           | 0.87           | 74.73          | 75.19          | 75.25          | 74.86          | 75.21             | 77.06             | 78.02             | 76.96             | 77.12             | 74.50             |
| 70    | 0.87           | 0.88           | 0.88           | 0.87           | 74.69          | 75.11          | 75.26          | 74.85          | 75.02             | 77.05             | 78.06             | 76.91             | 77.05             | 74.41             |
| 80    | 0.87           | 0.88           | 0.88           | 0.87           | 74.89          | 75.14          | 75.27          | 75.03          | 75.05             | 77.07             | 78.14             | 77.00             | 77.08             | 74.39             |
| 90    | 0.87           | 0.88           | 0.88           | 0.88           | 75.01          | 75.28          | 75.38          | 75.10          | 75.13             | 77.17             | 78.19             | 77.10             | 77.14             | 74.44             |
| 100   | 0.87           | 0.88           | 0.88           | 0.88           | 75.09          | 75.45          | 75.50          | 75.25          | 75.14             | 77.24             | 78.35             | 77.17             | 77.25             | 74.52             |

*Typical Performance Data (Low Frequency)***Definitions:**

| STATE | V <sub>C1</sub> | V <sub>C2</sub> | MODE       |
|-------|-----------------|-----------------|------------|
| 1     | LOW             | LOW             | RF-OUT1 ON |
| 2     | HIGH            | LOW             | RF-OUT2 ON |
| 3     | LOW             | HIGH            | RF-OUT3 ON |
| 4     | HIGH            | HIGH            | RF-OUT4 ON |

TEST CONDITIONS: V<sub>DD</sub> = +3.3V, V<sub>EE</sub> = -3.3V @ Temperature = +25°C

| FREQ  | Return Loss |                  |                  |                  |                  |                   |                   |                   |                   |
|-------|-------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
|       | RFC         | RF-OUT 1<br>(On) | RF-OUT 2<br>(On) | RF-OUT 3<br>(On) | RF-OUT 4<br>(On) | RF-OUT 1<br>(Off) | RF-OUT 2<br>(Off) | RF-OUT 3<br>(Off) | RF-OUT 4<br>(Off) |
| (MHz) | (dB)        | (dB)             | (dB)             | (dB)             | (dB)             | (dB)              | (dB)              | (dB)              | (dB)              |
| 0.009 | 19.84       | 21.11            | 22.37            | 22.84            | 22.79            | 15.40             | 14.79             | 14.59             | 14.60             |
| 0.25  | 20.36       | 21.81            | 23.21            | 23.74            | 23.69            | 15.47             | 14.85             | 14.64             | 14.65             |
| 0.5   | 20.35       | 21.81            | 23.22            | 23.76            | 23.71            | 15.47             | 14.85             | 14.64             | 14.65             |
| 0.75  | 20.34       | 21.79            | 23.20            | 23.75            | 23.70            | 15.48             | 14.86             | 14.64             | 14.65             |
| 1     | 20.40       | 21.81            | 23.26            | 23.75            | 23.70            | 15.47             | 14.83             | 14.64             | 14.66             |
| 2     | 20.37       | 21.83            | 23.28            | 23.78            | 23.73            | 15.47             | 14.85             | 14.64             | 14.66             |
| 3     | 20.36       | 21.86            | 23.28            | 23.79            | 23.74            | 15.47             | 14.86             | 14.66             | 14.67             |
| 4     | 20.37       | 21.88            | 23.28            | 23.81            | 23.75            | 15.46             | 14.87             | 14.67             | 14.68             |
| 5     | 20.38       | 21.91            | 23.30            | 23.82            | 23.77            | 15.45             | 14.87             | 14.67             | 14.68             |
| 6     | 20.37       | 21.95            | 23.31            | 23.84            | 23.78            | 15.44             | 14.88             | 14.67             | 14.68             |
| 7     | 20.38       | 21.97            | 23.32            | 23.85            | 23.79            | 15.44             | 14.87             | 14.67             | 14.68             |
| 8     | 20.38       | 21.98            | 23.31            | 23.85            | 23.79            | 15.43             | 14.87             | 14.67             | 14.68             |
| 9     | 20.39       | 21.99            | 23.32            | 23.87            | 23.81            | 15.42             | 14.88             | 14.68             | 14.69             |
| 10    | 20.41       | 22.00            | 23.34            | 23.89            | 23.83            | 15.42             | 14.88             | 14.69             | 14.70             |
| 20    | 20.41       | 22.03            | 23.33            | 23.88            | 23.80            | 15.43             | 14.90             | 14.70             | 14.72             |
| 30    | 20.37       | 22.02            | 23.30            | 23.84            | 23.74            | 15.43             | 14.91             | 14.72             | 14.73             |
| 40    | 20.36       | 21.97            | 23.23            | 23.76            | 23.67            | 15.44             | 14.94             | 14.74             | 14.75             |
| 50    | 20.34       | 21.91            | 23.15            | 23.67            | 23.58            | 15.45             | 14.96             | 14.76             | 14.77             |
| 60    | 20.33       | 21.88            | 23.10            | 23.61            | 23.52            | 15.47             | 14.97             | 14.77             | 14.79             |
| 70    | 20.33       | 21.84            | 23.04            | 23.54            | 23.45            | 15.47             | 14.98             | 14.79             | 14.81             |
| 80    | 20.33       | 21.82            | 23.02            | 23.50            | 23.41            | 15.48             | 15.00             | 14.81             | 14.83             |
| 90    | 20.36       | 21.82            | 22.98            | 23.45            | 23.37            | 15.49             | 15.01             | 14.83             | 14.85             |
| 100   | 20.38       | 21.81            | 22.94            | 23.40            | 23.33            | 15.49             | 15.02             | 14.84             | 14.87             |

## Typical Performance Data

## Definitions:

| STATE | V <sub>C1</sub> | V <sub>C2</sub> | MODE       |
|-------|-----------------|-----------------|------------|
| 1     | LOW             | LOW             | RF-OUT1 ON |
| 2     | HIGH            | LOW             | RF-OUT2 ON |
| 3     | LOW             | HIGH            | RF-OUT3 ON |
| 4     | HIGH            | HIGH            | RF-OUT4 ON |

TEST CONDITIONS: V<sub>DD</sub> = +3.3V, V<sub>EE</sub> = -3.3V @ Temperature = +25°C

| FREQ  | Insertion Loss |               |               |               | Isolation     |               |               |               |                   |                   |                   |                   |                   |                   |
|-------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|       | RF - RF-OUT 1  | RF - RF-OUT 2 | RF - RF-OUT 3 | RF - RF-OUT 4 | RF - RF-OUT 1 | RF - RF-OUT 2 | RF - RF-OUT 3 | RF - RF-OUT 4 | RF-OUT1 - RF-OUT2 | RF-OUT1 - RF-OUT3 | RF-OUT1 - RF-OUT4 | RF-OUT2 - RF-OUT3 | RF-OUT2 - RF-OUT4 | RF-OUT3 - RF-OUT4 |
| (GHz) | (dB)           | (dB)          | (dB)          | (dB)          | (dB)          | (dB)          | (dB)          | (dB)          | (dB)              | (dB)              | (dB)              | (dB)              | (dB)              | (dB)              |
| 0.01  | 0.90           | 0.90          | 0.89          | 0.89          | 77.98         | 73.90         | 75.16         | 74.60         | 75.94             | 77.68             | 79.16             | 77.35             | 79.88             | 75.62             |
| 0.05  | 0.91           | 0.91          | 0.90          | 0.89          | 75.04         | 75.55         | 76.41         | 74.43         | 75.13             | 77.41             | 75.64             | 76.77             | 74.29             |                   |
| 0.1   | 0.92           | 0.91          | 0.90          | 0.89          | 75.29         | 75.59         | 75.40         | 75.45         | 74.79             | 77.58             | 77.76             | 77.61             | 76.92             | 74.51             |
| 0.2   | 0.93           | 0.92          | 0.91          | 0.90          | 75.18         | 77.31         | 78.16         | 75.72         | 76.09             | 79.38             | 79.23             | 79.85             | 79.44             | 75.25             |
| 0.4   | 0.94           | 0.94          | 0.91          | 0.91          | 70.80         | 80.76         | 80.93         | 71.08         | 70.79             | 80.86             | 81.42             | 83.17             | 81.33             | 71.15             |
| 0.6   | 0.97           | 0.97          | 0.94          | 0.94          | 67.46         | 76.39         | 76.36         | 67.48         | 68.04             | 80.21             | 82.48             | 81.56             | 79.61             | 67.77             |
| 0.8   | 1.00           | 1.01          | 0.98          | 0.97          | 64.92         | 73.62         | 73.68         | 64.86         | 66.03             | 78.82             | 80.65             | 79.31             | 78.97             | 65.73             |
| 1.0   | 1.04           | 1.05          | 1.01          | 1.00          | 63.04         | 71.21         | 71.48         | 63.04         | 64.11             | 77.92             | 79.16             | 76.93             | 77.73             | 63.87             |
| 1.5   | 1.14           | 1.15          | 1.11          | 1.10          | 59.96         | 67.92         | 68.00         | 59.79         | 60.98             | 74.38             | 76.16             | 73.83             | 74.26             | 60.82             |
| 2.0   | 1.21           | 1.21          | 1.18          | 1.18          | 57.92         | 65.70         | 65.73         | 57.69         | 58.82             | 71.17             | 73.81             | 71.73             | 71.22             | 58.67             |
| 2.5   | 1.24           | 1.24          | 1.21          | 1.20          | 56.44         | 64.36         | 64.22         | 56.34         | 57.38             | 68.68             | 70.61             | 70.93             | 68.52             | 57.13             |
| 3.0   | 1.25           | 1.24          | 1.20          | 1.20          | 55.43         | 63.21         | 63.19         | 55.44         | 56.15             | 66.95             | 68.02             | 70.03             | 66.65             | 55.93             |
| 3.5   | 1.25           | 1.23          | 1.18          | 1.19          | 54.83         | 62.41         | 62.33         | 54.70         | 55.27             | 65.57             | 66.33             | 68.79             | 65.76             | 55.07             |
| 4.0   | 1.29           | 1.26          | 1.22          | 1.23          | 54.16         | 61.74         | 61.70         | 54.18         | 54.62             | 64.97             | 65.21             | 69.15             | 64.82             | 54.45             |
| 4.5   | 1.40           | 1.35          | 1.29          | 1.35          | 53.84         | 61.52         | 61.38         | 53.74         | 54.05             | 64.01             | 64.04             | 69.34             | 64.05             | 53.82             |
| 5.0   | 1.50           | 1.44          | 1.41          | 1.45          | 53.53         | 61.34         | 61.12         | 53.45         | 53.49             | 62.98             | 63.02             | 68.72             | 62.97             | 53.24             |
| 5.5   | 1.55           | 1.47          | 1.45          | 1.49          | 53.35         | 61.35         | 61.14         | 53.25         | 53.06             | 61.77             | 61.54             | 68.22             | 61.65             | 52.79             |
| 6.0   | 1.54           | 1.47          | 1.45          | 1.48          | 53.12         | 61.38         | 60.62         | 53.13         | 52.31             | 60.58             | 60.30             | 67.75             | 60.45             | 52.00             |
| 6.5   | 1.53           | 1.46          | 1.42          | 1.46          | 52.82         | 59.79         | 59.26         | 52.41         | 51.39             | 59.46             | 59.19             | 67.15             | 59.41             | 51.18             |
| 7.0   | 1.55           | 1.47          | 1.41          | 1.47          | 52.07         | 58.49         | 58.38         | 51.50         | 50.59             | 58.87             | 58.26             | 67.02             | 58.73             | 50.40             |
| 7.5   | 1.62           | 1.52          | 1.49          | 1.53          | 51.36         | 57.81         | 57.57         | 50.92         | 50.51             | 58.58             | 57.87             | 67.71             | 58.43             | 49.74             |
| 8.0   | 1.69           | 1.60          | 1.57          | 1.62          | 50.81         | 56.93         | 56.63         | 50.64         | 49.57             | 57.92             | 57.38             | 68.15             | 58.04             | 49.26             |
| 8.5   | 1.73           | 1.64          | 1.59          | 1.65          | 50.46         | 56.08         | 55.72         | 50.28         | 49.18             | 57.45             | 56.93             | 68.15             | 57.32             | 48.82             |
| 9.0   | 1.72           | 1.63          | 1.57          | 1.63          | 50.01         | 55.09         | 54.59         | 49.60         | 48.70             | 56.76             | 56.25             | 67.99             | 56.80             | 48.36             |
| 9.5   | 1.73           | 1.62          | 1.56          | 1.63          | 49.32         | 53.91         | 53.46         | 48.92         | 48.16             | 56.08             | 55.65             | 68.32             | 56.17             | 47.90             |
| 10.0  | 1.75           | 1.65          | 1.58          | 1.67          | 48.62         | 53.07         | 52.62         | 48.30         | 47.77             | 55.54             | 55.16             | 68.80             | 55.50             | 47.49             |
| 10.5  | 1.80           | 1.70          | 1.64          | 1.73          | 48.15         | 52.58         | 52.07         | 47.85         | 47.39             | 55.03             | 54.90             | 68.89             | 55.09             | 47.14             |
| 11.0  | 1.89           | 1.73          | 1.69          | 1.80          | 47.77         | 52.11         | 51.53         | 47.60         | 47.15             | 54.73             | 54.67             | 68.54             | 54.63             | 46.92             |
| 11.5  | 1.95           | 1.77          | 1.74          | 1.86          | 47.54         | 51.64         | 51.30         | 47.38         | 47.10             | 54.36             | 54.62             | 68.38             | 54.27             | 46.83             |
| 12.0  | 1.95           | 1.81          | 1.75          | 1.90          | 47.33         | 51.21         | 51.01         | 47.16         | 47.01             | 54.02             | 54.38             | 68.61             | 53.98             | 46.78             |
| 12.5  | 1.94           | 1.83          | 1.75          | 1.91          | 47.08         | 50.66         | 50.52         | 46.83         | 46.99             | 53.71             | 54.36             | 69.50             | 53.59             | 46.67             |
| 13.0  | 1.95           | 1.83          | 1.72          | 1.91          | 46.77         | 50.07         | 49.79         | 46.41         | 46.89             | 53.30             | 54.06             | 69.03             | 53.28             | 46.56             |
| 13.5  | 1.97           | 1.85          | 1.72          | 1.92          | 46.50         | 49.48         | 49.15         | 46.09         | 46.77             | 52.87             | 53.85             | 68.84             | 52.94             | 46.46             |
| 14.0  | 1.99           | 1.86          | 1.76          | 1.93          | 46.32         | 49.09         | 48.87         | 45.89         | 46.70             | 52.48             | 53.75             | 69.21             | 52.60             | 46.48             |
| 14.5  | 2.02           | 1.87          | 1.80          | 1.94          | 45.97         | 48.71         | 48.42         | 45.71         | 46.74             | 52.16             | 53.62             | 69.47             | 52.29             | 46.44             |
| 15.0  | 2.03           | 1.86          | 1.81          | 1.96          | 45.50         | 48.32         | 47.94         | 45.45         | 46.80             | 51.98             | 53.39             | 69.26             | 52.00             | 46.55             |
| 15.5  | 2.06           | 1.88          | 1.83          | 2.01          | 45.33         | 47.95         | 47.51         | 45.26         | 46.91             | 51.76             | 53.10             | 68.19             | 51.73             | 46.72             |
| 16.0  | 2.12           | 1.93          | 1.87          | 2.06          | 45.37         | 47.79         | 47.38         | 45.27         | 47.11             | 51.60             | 52.96             | 67.06             | 51.59             | 47.00             |
| 16.5  | 2.16           | 1.97          | 1.90          | 2.14          | 45.59         | 47.68         | 47.44         | 45.46         | 47.50             | 51.53             | 52.86             | 65.99             | 51.57             | 47.44             |
| 17.0  | 2.17           | 1.98          | 1.88          | 2.15          | 45.53         | 47.71         | 47.48         | 45.51         | 47.94             | 51.52             | 52.80             | 64.74             | 51.58             | 47.94             |
| 17.5  | 2.18           | 2.00          | 1.90          | 2.16          | 45.21         | 47.67         | 47.42         | 45.39         | 48.48             | 51.71             | 52.83             | 64.47             | 51.79             | 48.39             |
| 18.0  | 2.21           | 2.03          | 1.95          | 2.20          | 44.92         | 47.50         | 47.20         | 45.11         | 48.74             | 51.66             | 52.77             | 64.83             | 51.89             | 48.61             |
| 18.5  | 2.19           | 2.00          | 1.92          | 2.19          | 44.52         | 47.24         | 46.82         | 44.83         | 48.79             | 51.68             | 52.52             | 64.70             | 51.79             | 48.64             |
| 19.0  | 2.14           | 1.93          | 1.84          | 2.08          | 44.47         | 46.81         | 46.36         | 44.65         | 48.81             | 51.55             | 52.09             | 64.00             | 51.63             | 48.62             |
| 19.5  | 2.17           | 1.96          | 1.87          | 2.08          | 44.79         | 46.65         | 46.35         | 44.71         | 49.11             | 51.44             | 51.88             | 62.66             | 51.40             | 48.89             |
| 20.0  | 2.31           | 2.10          | 2.01          | 2.25          | 45.19         | 46.91         | 46.61         | 45.11         | 49.76             | 51.43             | 51.76             | 62.12             | 51.34             | 49.43             |
| 20.5  | 2.35           | 2.13          | 2.04          | 2.33          | 45.33         | 47.26         | 46.93         | 45.28         | 50.59             | 51.48             | 51.58             | 62.16             | 51.46             | 50.22             |
| 21.0  | 2.36           | 2.10          | 2.04          | 2.31          | 45.21         | 47.52         | 47.09         | 45.15         | 51.30             | 51.55             | 51.58             | 62.56             | 51.51             | 50.88             |
| 21.5  | 2.40           | 2.19          | 2.10          | 2.38          | 44.99         | 47.59         | 47.13         | 44.94         | 51.63             | 51.53             | 51.49             | 62.38             | 51.49             | 51.16             |
| 22.0  | 2.45           | 2.27          | 2.16          | 2.45          | 45.03         | 47.27         | 46.92         | 44.77         | 51.35             | 51.22             | 51.01             | 62.49             | 51.20             | 51.02             |
| 22.5  | 2.44           | 2.21          | 2.11          | 2.43          | 45.14         | 47.01         | 46.69         | 44.91         | 51.01             | 50.92             | 50.66             | 62.50             | 50.86             | 50.83             |
| 23.0  | 2.39           | 2.13          | 2.03          | 2.30          | 45.38         | 46.95         | 46.71         | 45.28         | 51.02             | 50.79             | 50.50             | 62.53             | 50.75             | 50.95             |
| 23.5  | 2.35           | 2.16          | 2.06          | 2.25          | 45.74         | 47.18         | 46.90         | 45.76         | 51.29             | 50.68             | 50.41             | 63.06             | 50.70             | 51.12             |
| 24.0  | 2.40           | 2.22          | 2.13          | 2.31          | 46.44         | 47.57         | 47.29         | 46.17         | 51.68             | 50.68             | 50.40             | 63.46             | 50.63             | 51.40             |
| 24.5  | 2.45           | 2.26          | 2.19          | 2.37          | 46.92         | 48.03         | 47.68         | 46.48         | 51.72             | 50.75             | 50.34             | 63.74             | 50.64             | 51.70             |
| 25.0  | 2.51           | 2.28          | 2.24          | 2.42          | 46.94         | 48.14         | 47.95         | 46.55         | 51.58             | 50.69             | 50.35             | 64.02             | 50.58             | 51.71             |
| 25.5  | 2.55           | 2.30          | 2.28          | 2.48          | 46.77         | 48.19         | 48.04         | 46.64         | 51.29             | 50.64             | 50.22             | 64.95             | 50.46             | 51.42             |
| 26.0  | 2.58           | 2.32          | 2.33          | 2.52          | 46.72         | 48.18         | 48.10         | 46.57         | 50.95             | 50.47             | 50.13             | 65.65             | 50.41             | 51.10             |
| 26.5  | 2.61           | 2.39          | 2.36          | 2.56          | 46.90         | 48.27         | 48.22         | 46.55         | 50.55             | 50.37             | 50.01             | 66.54             | 50.30             | 50.79             |
| 27.0  | 2.65           | 2.44          | 2.38          | 2.58          | 47.11         | 48.33         | 48.17         | 46.63         | 50.14             | 50.25             | 49.95             | 67.02             | 50.13             | 50.28             |
| 28.0  | 2.62           | 2.44          | 2.37          | 2.55          | 47.33         | 48.25         | 48.09         | 47.03         | 48.90             | 50.22             | 49.77             | 66.77             | 50.13             | 49.03             |
| 29.0  | 2.67           | 2.57          | 2.51          | 2.61          | 47.91         | 48.66         | 48.79         | 48.33         | 48.02             | 50.32             | 49.69             | 68.29             | 50.17             | 48.28             |
| 30.0  | 2.82           | 2.59          | 2.56          | 2.77          | 47.73         | 49.15         | 49.30         | 47.75         | 47.84             | 50.37             | 49.32             | 67.45             | 50.31             | 47.95             |

## Typical Performance Data

### Definitions:

| STATE | V <sub>c1</sub> | V <sub>c2</sub> | MODE       |
|-------|-----------------|-----------------|------------|
| 1     | LOW             | LOW             | RF-OUT1 ON |
| 2     | HIGH            | LOW             | RF-OUT2 ON |
| 3     | LOW             | HIGH            | RF-OUT3 ON |
| 4     | HIGH            | HIGH            | RF-OUT4 ON |

TEST CONDITIONS: V<sub>DD</sub> = +3.3V, V<sub>EE</sub> = -3.3V @ Temperature = +25°C

| FREQ  | Return Loss |               |               |               |               |                |                |                |                |
|-------|-------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
|       | RFC         | RF-OUT 1 (On) | RF-OUT 2 (On) | RF-OUT 3 (On) | RF-OUT 4 (On) | RF-OUT 1 (Off) | RF-OUT 2 (Off) | RF-OUT 3 (Off) | RF-OUT 4 (Off) |
| (MHz) | (dB)        | (dB)          | (dB)          | (dB)          | (dB)          | (dB)           | (dB)           | (dB)           | (dB)           |
| 0.01  | 21.43       | 21.54         | 21.52         | 21.60         | 21.55         | 15.47          | 15.42          | 15.38          | 15.39          |
| 0.05  | 21.36       | 21.57         | 21.56         | 21.51         | 21.50         | 15.57          | 15.60          | 15.56          | 15.58          |
| 0.1   | 21.11       | 21.50         | 21.58         | 21.54         | 21.50         | 15.70          | 15.58          | 15.59          | 15.61          |
| 0.2   | 20.89       | 21.28         | 21.16         | 21.20         | 21.23         | 15.74          | 15.79          | 15.70          | 15.72          |
| 0.4   | 20.58       | 21.14         | 20.89         | 20.92         | 20.90         | 15.96          | 15.91          | 15.90          | 15.87          |
| 0.6   | 20.52       | 20.87         | 20.67         | 20.63         | 20.82         | 16.00          | 16.14          | 15.98          | 15.88          |
| 0.8   | 20.37       | 20.75         | 19.97         | 20.24         | 20.56         | 16.04          | 16.39          | 16.22          | 16.05          |
| 1.0   | 20.12       | 20.54         | 19.97         | 19.96         | 20.34         | 16.15          | 16.61          | 16.38          | 16.27          |
| 1.5   | 19.79       | 20.13         | 19.52         | 19.59         | 19.71         | 16.59          | 17.49          | 17.12          | 16.82          |
| 2.0   | 20.05       | 20.23         | 20.48         | 20.12         | 20.40         | 17.31          | 18.39          | 18.16          | 17.57          |
| 2.5   | 21.19       | 21.82         | 21.76         | 21.90         | 21.16         | 18.03          | 19.06          | 19.10          | 18.31          |
| 3.0   | 21.68       | 22.93         | 23.44         | 23.49         | 22.59         | 18.32          | 18.68          | 18.53          | 18.09          |
| 3.5   | 20.65       | 21.53         | 23.85         | 23.62         | 22.33         | 17.81          | 17.55          | 17.67          | 17.43          |
| 4.0   | 18.39       | 19.30         | 21.28         | 21.29         | 19.46         | 17.38          | 17.08          | 17.09          | 16.83          |
| 4.5   | 16.06       | 16.56         | 17.36         | 18.28         | 16.56         | 17.62          | 17.61          | 17.49          | 17.04          |
| 5.0   | 15.03       | 15.69         | 16.54         | 17.22         | 15.76         | 18.62          | 19.33          | 18.84          | 18.15          |
| 5.5   | 15.26       | 16.20         | 17.27         | 18.17         | 15.97         | 20.43          | 21.97          | 20.11          | 19.57          |
| 6.0   | 16.38       | 18.60         | 19.85         | 20.51         | 18.25         | 22.20          | 22.25          | 20.65          | 21.02          |
| 6.5   | 17.22       | 19.29         | 22.46         | 21.39         | 18.88         | 21.05          | 21.14          | 19.67          | 20.82          |
| 7.0   | 16.86       | 18.70         | 21.79         | 19.89         | 18.05         | 19.78          | 19.64          | 18.83          | 19.48          |
| 7.5   | 15.90       | 16.73         | 18.54         | 17.46         | 16.79         | 19.74          | 18.98          | 19.16          | 20.13          |
| 8.0   | 14.96       | 15.38         | 16.61         | 16.58         | 15.35         | 21.23          | 20.19          | 20.44          | 21.80          |
| 8.5   | 14.79       | 16.09         | 17.23         | 17.01         | 16.32         | 24.56          | 22.03          | 22.49          | 23.37          |
| 9.0   | 15.15       | 18.04         | 19.11         | 19.59         | 18.17         | 25.60          | 26.31          | 26.25          | 30.27          |
| 9.5   | 16.04       | 19.20         | 21.85         | 22.33         | 21.19         | 25.23          | 27.04          | 23.93          | 25.51          |
| 10.0  | 15.55       | 18.45         | 21.45         | 20.61         | 19.93         | 23.17          | 24.01          | 21.80          | 22.08          |
| 10.5  | 14.78       | 16.43         | 19.09         | 17.91         | 16.10         | 21.79          | 22.11          | 20.01          | 20.76          |
| 11.0  | 13.79       | 15.25         | 17.24         | 17.18         | 15.17         | 21.71          | 22.39          | 20.19          | 21.28          |
| 11.5  | 13.82       | 15.19         | 17.60         | 17.41         | 15.75         | 23.23          | 23.97          | 22.04          | 23.46          |
| 12.0  | 13.83       | 17.17         | 19.50         | 19.27         | 16.91         | 26.91          | 26.81          | 25.87          | 27.28          |
| 12.5  | 14.31       | 19.31         | 21.24         | 21.27         | 17.89         | 31.20          | 28.41          | 30.28          | 27.98          |
| 13.0  | 14.75       | 19.44         | 21.13         | 22.36         | 19.21         | 33.26          | 26.51          | 30.27          | 29.06          |
| 13.5  | 14.54       | 18.57         | 21.28         | 22.73         | 19.03         | 30.54          | 25.80          | 29.01          | 30.93          |
| 14.0  | 14.15       | 18.58         | 22.42         | 23.69         | 19.06         | 28.61          | 26.04          | 26.42          | 29.73          |
| 14.5  | 14.12       | 19.12         | 25.07         | 23.73         | 19.88         | 28.77          | 28.10          | 26.97          | 29.82          |
| 15.0  | 14.36       | 19.60         | 24.30         | 22.87         | 20.53         | 29.15          | 30.05          | 27.77          | 31.04          |
| 15.5  | 14.52       | 18.96         | 22.37         | 20.97         | 19.18         | 29.65          | 27.15          | 23.68          | 33.00          |
| 16.0  | 14.37       | 17.36         | 19.90         | 19.34         | 17.12         | 25.51          | 23.10          | 22.37          | 26.38          |
| 16.5  | 14.34       | 16.78         | 19.64         | 18.15         | 15.89         | 22.39          | 20.78          | 20.58          | 22.55          |
| 17.0  | 13.80       | 18.95         | 21.00         | 20.44         | 18.90         | 20.15          | 19.52          | 19.13          | 20.46          |
| 17.5  | 13.33       | 26.37         | 27.95         | 27.65         | 23.22         | 19.63          | 19.22          | 20.22          | 20.61          |
| 18.0  | 12.67       | 23.04         | 25.62         | 24.67         | 22.63         | 22.26          | 20.80          | 20.96          | 20.51          |
| 18.5  | 13.10       | 18.25         | 21.82         | 23.46         | 18.73         | 26.26          | 24.73          | 26.02          | 24.09          |
| 19.0  | 15.41       | 17.66         | 24.03         | 25.62         | 18.17         | 31.27          | 32.31          | 32.72          | 31.54          |
| 19.5  | 17.24       | 16.24         | 21.52         | 20.18         | 16.16         | 22.63          | 22.66          | 22.19          | 25.96          |
| 20.0  | 15.44       | 15.66         | 17.16         | 16.65         | 14.54         | 18.24          | 17.04          | 16.61          | 18.38          |
| 20.5  | 14.38       | 18.30         | 17.47         | 17.31         | 17.07         | 15.74          | 14.35          | 14.69          | 15.70          |
| 21.0  | 13.51       | 30.87         | 20.45         | 20.49         | 27.08         | 14.95          | 13.56          | 14.50          | 14.50          |
| 21.5  | 12.88       | 22.18         | 17.96         | 17.51         | 22.08         | 15.73          | 14.44          | 15.41          | 14.75          |
| 22.0  | 13.03       | 17.92         | 17.13         | 17.26         | 17.88         | 18.57          | 17.57          | 17.90          | 16.67          |
| 22.5  | 14.73       | 17.72         | 21.47         | 22.61         | 17.46         | 24.38          | 24.69          | 23.58          | 21.45          |
| 23.0  | 17.00       | 19.21         | 29.22         | 33.38         | 18.15         | 23.38          | 23.73          | 24.74          | 24.82          |
| 23.5  | 18.99       | 21.10         | 22.37         | 21.10         | 20.68         | 18.24          | 17.41          | 18.54          | 19.13          |
| 24.0  | 18.41       | 25.21         | 20.36         | 19.70         | 23.35         | 15.87          | 15.39          | 15.31          | 16.10          |
| 24.5  | 17.49       | 29.49         | 19.95         | 18.60         | 30.44         | 15.30          | 14.19          | 13.34          | 14.41          |
| 25.0  | 16.41       | 27.43         | 19.24         | 17.84         | 30.78         | 15.12          | 13.58          | 13.13          | 13.67          |
| 25.5  | 16.57       | 24.52         | 18.19         | 17.68         | 25.24         | 14.61          | 13.73          | 13.14          | 13.46          |
| 26.0  | 16.28       | 24.87         | 17.72         | 17.41         | 21.96         | 14.47          | 13.98          | 12.92          | 13.73          |
| 26.5  | 16.06       | 23.05         | 17.89         | 17.06         | 20.87         | 13.53          | 13.57          | 12.69          | 12.94          |
| 27.0  | 15.84       | 20.16         | 17.38         | 17.45         | 18.86         | 13.44          | 13.69          | 12.89          | 12.76          |
| 28.0  | 14.80       | 21.89         | 20.83         | 21.28         | 21.65         | 15.81          | 14.80          | 15.74          | 16.12          |
| 29.0  | 16.33       | 24.74         | 15.74         | 14.82         | 24.84         | 12.27          | 12.43          | 11.45          | 11.74          |
| 30.0  | 18.44       | 20.27         | 14.39         | 13.52         | 20.72         | 9.64           | 9.69           | 8.62           | 9.27           |

## Typical Performance Data

## Definitions:

| STATE | V <sub>C1</sub> | V <sub>C2</sub> | MODE       |
|-------|-----------------|-----------------|------------|
| 1     | LOW             | LOW             | RF-OUT1 ON |
| 2     | HIGH            | LOW             | RF-OUT2 ON |
| 3     | LOW             | HIGH            | RF-OUT3 ON |
| 4     | HIGH            | HIGH            | RF-OUT4 ON |

TEST CONDITIONS: V<sub>DD</sub> = +3.3V, V<sub>EE</sub> = -3.3V @ Temperature = +25°C

| FREQ    | Input Power at 1 dB Compression |                  |                  |                  | Input Power at 0.1 dB Compression |                  |                  |                  | Input IIP3       |                  |                  |                  |
|---------|---------------------------------|------------------|------------------|------------------|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|         | RF-OUT 1<br>(On)                | RF-OUT 2<br>(On) | RF-OUT 3<br>(On) | RF-OUT 4<br>(On) | RF-OUT 1<br>(On)                  | RF-OUT 2<br>(On) | RF-OUT 3<br>(On) | RF-OUT 4<br>(On) | RF-OUT 1<br>(On) | RF-OUT 2<br>(On) | RF-OUT 3<br>(On) | RF-OUT 4<br>(On) |
| (GHz)   | (dBm)                           | (dBm)            | (dBm)            | (dBm)            | (dBm)                             | (dBm)            | (dBm)            | (dBm)            | (dBm)            | (dBm)            | (dBm)            | (dBm)            |
| 0.00010 | 13.77                           | 13.74            | 13.74            | 13.74            | 9.21                              | 9.32             | 9.26             | 9.21             | 26.20            | 26.36            | 26.13            | 26.05            |
| 0.00025 | 13.81                           | 13.81            | 13.80            | 13.81            | 10.87                             | 11.08            | 10.86            | 10.87            | 27.38            | 27.49            | 27.07            | 27.28            |
| 0.0005  | 13.92                           | 13.92            | 13.91            | 13.91            | 10.96                             | 10.96            | 10.95            | 10.95            | 24.94            | 24.97            | 24.89            | 24.94            |
| 0.00075 | 13.90                           | 13.91            | 13.89            | 13.90            | 10.93                             | 10.93            | 10.92            | 10.92            | 25.06            | 25.09            | 24.95            | 25.04            |
| 0.001   | 13.89                           | 13.89            | 13.88            | 13.88            | 10.92                             | 10.92            | 10.91            | 10.91            | 25.18            | 25.14            | 25.02            | 25.21            |
| 0.01    | 20.10                           | 19.49            | 19.48            | 20.10            | 14.20                             | 13.79            | 13.57            | 14.20            | 34.16            | 33.00            | 32.97            | 34.08            |
| 0.10    | 24.34                           | 24.16            | 24.16            | 24.54            | 21.21                             | 21.02            | 21.02            | 21.22            | 44.41            | 44.12            | 44.16            | 44.33            |
| 0.25    | 25.30                           | 24.92            | 24.91            | 25.49            | 21.95                             | 21.76            | 21.76            | 22.15            | 43.94            | 42.42            | 42.13            | 42.27            |
| 0.5     | 26.05                           | 26.02            | 26.02            | 26.24            | 22.48                             | 22.09            | 22.49            | 22.28            | 47.23            | 47.12            | 47.20            | 47.16            |
| 0.8     | 25.70                           | 25.66            | 25.66            | 25.88            | 22.95                             | 22.54            | 22.55            | 22.95            | 46.77            | 46.23            | 46.17            | 46.62            |
| 1.0     | 26.29                           | 26.25            | 26.41            | 26.29            | 23.79                             | 23.20            | 23.19            | 23.79            | 45.78            | 45.62            | 45.42            | 45.61            |
| 2.0     | 27.00                           | 27.19            | 27.19            | 27.20            | 24.42                             | 24.05            | 23.85            | 24.42            | 46.38            | 46.49            | 46.48            | 46.25            |
| 4.0     | 26.89                           | 26.90            | 26.90            | 27.07            | 24.48                             | 24.09            | 24.09            | 24.66            | 46.12            | 45.45            | 45.50            | 46.32            |
| 6.0     | 27.51                           | 27.73            | 27.51            | 27.50            | 24.96                             | 24.97            | 24.74            | 24.95            | 46.70            | 46.61            | 46.48            | 46.38            |
| 8.0     | 27.73                           | 27.73            | 27.72            | 27.92            | 25.30                             | 25.08            | 25.07            | 25.51            | 47.48            | 46.05            | 46.20            | 45.96            |
| 10.0    | 27.74                           | 27.71            | 27.72            | 27.74            | 25.01                             | 24.77            | 24.56            | 25.01            | 46.33            | 46.45            | 46.60            | 46.27            |
| 15.0    | 27.95                           | 27.99            | 27.80            | 28.14            | 25.54                             | 25.32            | 25.11            | 25.54            | 45.42            | 45.54            | 45.40            | 45.17            |
| 18.0    | 28.63                           | 28.65            | 28.65            | 28.63            | 25.78                             | 25.97            | 25.91            | 26.01            | 43.91            | 44.25            | 44.51            | 44.00            |
| 21.0    | 28.81                           | 28.65            | 28.69            | 28.93            | 25.87                             | 26.17            | 25.86            | 25.88            | 43.92            | 44.54            | 44.79            | 44.31            |
| 24.0    | 28.66                           | 28.69            | 28.77            | 28.67            | 25.41                             | 26.35            | 26.20            | 25.66            | 39.85            | 40.57            | 40.39            | 40.10            |
| 27.0    | 28.61                           | 28.69            | 28.69            | 28.69            | 25.24                             | 26.62            | 26.89            | 25.59            | 39.21            | 39.55            | 39.79            | 39.55            |
| 30.0    | 28.47                           | 29.12            | 29.12            | 28.41            | 24.90                             | 27.41            | 27.36            | 25.09            | 38.58            | 37.43            | 37.42            | 38.59            |