## *Typical Performance Data*

### NOTE: Use PDF Bookmarks to view DATA at required conditions

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.3V, Id = 76.18 mA @ Temperature = +25degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.73 | 23.19 | 14.21 | 18.51 | 1.14 | 0.76 | 31.53 | 17.82 | 2.10 |
| 80.00 | 17.14 | 22.43 | 16.76 | 18.87 | 1.14 | 0.73 | 32.21 | 17.91 | 1.97 |
| 100.00 | 16.93 | 22.26 | 18.14 | 19.00 | 1.15 | 0.72 | 32.46 | 17.83 | 2.00 |
| 200.00 | 16.55 | 22.00 | 21.40 | 19.27 | 1.18 | 0.72 | 32.09 | 17.88 | 1.96 |
| 400.00 | 16.32 | 21.92 | 22.06 | 19.17 | 1.19 | 0.72 | 32.80 | 17.69 | 2.18 |
| 500.00 | 16.22 | 21.95 | 21.60 | 19.08 | 1.20 | 0.73 | 32.65 | 17.75 | 2.22 |
| 600.00 | 16.12 | 21.91 | 20.87 | 18.92 | 1.21 | 0.73 | 32.75 | 17.73 | 2.18 |
| 800.00 | 15.90 | 21.94 | 19.22 | 18.59 | 1.23 | 0.75 | 32.97 | 17.68 | 2.22 |
| 1000.00 | 15.63 | 21.95 | 17.75 | 18.27 | 1.24 | 0.77 | 32.35 | 17.74 | 2.14 |
| 1200.00 | 15.34 | 21.94 | 16.45 | 17.96 | 1.26 | 0.79 | 33.10 | 17.70 | 2.27 |
| 1400.00 | 15.03 | 21.96 | 15.29 | 17.73 | 1.29 | 0.81 | 33.34 | 17.71 | 2.28 |
| 1500.00 | 14.88 | 21.96 | 14.70 | 17.47 | 1.29 | 0.82 | 32.76 | 17.78 | 2.31 |
| 1600.00 | 14.70 | 21.96 | 14.37 | 17.59 | 1.31 | 0.83 | 33.06 | 17.69 | 2.35 |
| 1800.00 | 14.38 | 21.98 | 13.49 | 17.43 | 1.33 | 0.85 | 33.66 | 17.56 | 2.36 |
| 2000.00 | 14.04 | 21.97 | 12.88 | 17.64 | 1.36 | 0.87 | 33.23 | 17.81 | 2.39 |
| 2200.00 | 13.72 | 21.93 | 12.29 | 17.75 | 1.38 | 0.89 | 33.13 | 17.99 | 2.45 |
| 2400.00 | 13.42 | 21.90 | 11.83 | 17.77 | 1.40 | 0.91 | 33.38 | 17.82 | 2.44 |
| 2500.00 | 13.27 | 21.94 | 11.64 | 17.87 | 1.41 | 0.92 | 33.32 | 17.96 | 2.50 |
| 2600.00 | 13.13 | 21.94 | 11.46 | 17.91 | 1.43 | 0.93 | 33.58 | 17.80 | 2.61 |
| 2800.00 | 12.85 | 21.83 | 11.14 | 17.97 | 1.44 | 0.95 | 33.46 | 17.78 | 2.65 |
| 3000.00 | 12.57 | 21.81 | 10.87 | 17.73 | 1.46 | 0.96 | 33.43 | 17.84 | 2.57 |
| 3200.00 | 12.35 | 21.77 | 10.64 | 17.84 | 1.47 | 0.97 | 32.91 | 17.81 | 2.70 |
| 3400.00 | 12.09 | 21.84 | 10.61 | 18.20 | 1.52 | 0.98 | 33.34 | 17.88 | 2.73 |
| 3500.00 | 12.00 | 21.75 | 10.43 | 17.93 | 1.51 | 0.98 | 33.57 | 17.63 | 2.89 |
| 3600.00 | 11.89 | 21.62 | 10.24 | 17.62 | 1.50 | 0.99 | 33.63 | 17.80 | 2.78 |
| 3800.00 | 11.68 | 21.57 | 10.12 | 17.40 | 1.52 | 0.99 | 33.53 | 17.82 | 2.91 |
| 4000.00 | 11.51 | 21.44 | 9.87 | 17.10 | 1.51 | 1.00 | 33.78 | 17.77 | 3.01 |
| 4200.00 | 11.36 | 21.39 | 9.75 | 16.86 | 1.52 | 1.00 | 33.67 | 17.67 | 2.96 |
| 4400.00 | 11.24 | 21.35 | 9.57 | 16.39 | 1.51 | 1.01 | 33.48 | 17.50 | 3.04 |
| 4500.00 | 11.08 | 21.33 | 9.53 | 16.36 | 1.54 | 1.01 | 33.53 | 17.62 | 3.12 |
| 4600.00 | 11.06 | 21.42 | 9.49 | 16.15 | 1.55 | 1.01 | 33.33 | 17.68 | 3.19 |
| 4800.00 | 10.90 | 21.23 | 9.20 | 15.40 | 1.52 | 1.02 | 33.45 | 17.59 | 3.25 |
| 5000.00 | 10.75 | 21.21 | 9.09 | 15.04 | 1.53 | 1.02 | 33.46 | 17.18 | 3.27 |
| 5200.00 | 10.64 | 21.03 | 8.71 | 14.21 | 1.49 | 1.02 | 33.61 | 17.24 | 3.34 |
| 5400.00 | 10.55 | 20.98 | 8.50 | 13.69 | 1.48 | 1.02 | 33.92 | 16.79 | 3.45 |
| 5500.00 | 10.50 | 20.92 | 8.35 | 13.36 | 1.47 | 1.02 | 33.27 | 17.75 | 3.44 |
| 5600.00 | 10.67 | 21.34 | 8.50 | 13.68 | 1.51 | 1.03 | 33.63 | 17.27 | 3.51 |
| 5700.00 | 10.57 | 21.11 | 8.18 | 13.01 | 1.46 | 1.03 | 33.71 | 17.19 | 3.51 |
| 5800.00 | 10.48 | 20.92 | 7.96 | 12.52 | 1.43 | 1.03 | 33.58 | 17.27 | 3.59 |
| 5900.00 | 10.40 | 20.86 | 7.76 | 12.12 | 1.41 | 1.03 | 33.69 | 17.15 | 3.70 |
| 6000.00 | 10.37 | 20.82 | 7.64 | 12.03 | 1.40 | 1.03 | 34.30 | 16.80 | 3.72 |
| 6500.00 | 10.12 | 20.52 | 6.68 | 10.59 | 1.30 | 1.04 | 33.96 | 16.82 | 4.00 |
| 7000.00 | 9.73 | 20.58 | 5.74 | 9.16 | 1.23 | 1.05 | 33.55 | 16.34 | 4.12 |
| 7500.00 | 8.78 | 20.45 | 5.07 | 7.72 | 1.19 | 1.04 | 32.63 | 15.47 | 4.72 |
| 8000.00 | 7.49 | 21.63 | 4.30 | 6.09 | 1.27 | 1.01 | 30.33 | 15.48 | 5.32 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.1V, Id = 62.79 mA @ Temperature = +25degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.34 | 22.64 | 13.60 | 18.45 | 1.13 | 0.75 | 28.66 | 16.84 | 1.99 |
| 80.00 | 16.77 | 22.08 | 15.98 | 19.90 | 1.15 | 0.74 | 28.97 | 16.92 | 1.96 |
| 100.00 | 16.56 | 21.88 | 17.23 | 20.61 | 1.16 | 0.73 | 29.01 | 16.86 | 2.00 |
| 200.00 | 16.19 | 21.63 | 20.26 | 22.00 | 1.18 | 0.73 | 28.59 | 16.90 | 2.02 |
| 400.00 | 15.96 | 21.57 | 20.96 | 22.24 | 1.20 | 0.73 | 29.36 | 16.76 | 2.17 |
| 500.00 | 15.87 | 21.56 | 20.62 | 22.11 | 1.20 | 0.74 | 29.20 | 16.82 | 2.24 |
| 600.00 | 15.77 | 21.55 | 20.10 | 21.87 | 1.21 | 0.74 | 29.12 | 16.78 | 2.19 |
| 800.00 | 15.56 | 21.59 | 18.76 | 21.23 | 1.23 | 0.76 | 29.42 | 16.75 | 2.18 |
| 1000.00 | 15.30 | 21.57 | 17.41 | 20.62 | 1.24 | 0.78 | 28.69 | 16.82 | 2.17 |
| 1200.00 | 15.02 | 21.58 | 16.17 | 19.98 | 1.26 | 0.80 | 29.64 | 16.80 | 2.29 |
| 1400.00 | 14.71 | 21.63 | 15.06 | 19.48 | 1.28 | 0.82 | 29.51 | 16.80 | 2.29 |
| 1500.00 | 14.57 | 21.67 | 14.50 | 19.04 | 1.29 | 0.83 | 29.34 | 16.87 | 2.31 |
| 1600.00 | 14.39 | 21.65 | 14.14 | 19.06 | 1.31 | 0.84 | 29.74 | 16.80 | 2.31 |
| 1800.00 | 14.07 | 21.69 | 13.26 | 18.62 | 1.33 | 0.87 | 29.92 | 16.70 | 2.37 |
| 2000.00 | 13.74 | 21.70 | 12.62 | 18.55 | 1.35 | 0.89 | 29.52 | 16.91 | 2.39 |
| 2200.00 | 13.42 | 21.71 | 12.02 | 18.44 | 1.38 | 0.91 | 29.49 | 17.04 | 2.46 |
| 2400.00 | 13.12 | 21.71 | 11.54 | 18.17 | 1.40 | 0.93 | 29.85 | 16.93 | 2.52 |
| 2500.00 | 12.97 | 21.76 | 11.34 | 18.13 | 1.42 | 0.94 | 29.56 | 17.02 | 2.52 |
| 2600.00 | 12.83 | 21.73 | 11.16 | 18.06 | 1.42 | 0.95 | 29.80 | 16.92 | 2.59 |
| 2800.00 | 12.55 | 21.74 | 10.82 | 17.88 | 1.45 | 0.96 | 29.91 | 16.89 | 2.67 |
| 3000.00 | 12.27 | 21.73 | 10.53 | 17.55 | 1.47 | 0.98 | 29.73 | 16.92 | 2.61 |
| 3200.00 | 12.06 | 21.69 | 10.27 | 17.46 | 1.48 | 0.99 | 29.22 | 16.89 | 2.68 |
| 3400.00 | 11.81 | 21.81 | 10.24 | 17.65 | 1.53 | 1.00 | 29.72 | 16.94 | 2.72 |
| 3500.00 | 11.71 | 21.75 | 10.07 | 17.37 | 1.53 | 1.00 | 29.71 | 16.70 | 2.85 |
| 3600.00 | 11.61 | 21.61 | 9.88 | 17.06 | 1.51 | 1.00 | 30.05 | 16.86 | 2.75 |
| 3800.00 | 11.40 | 21.62 | 9.76 | 16.85 | 1.54 | 1.01 | 29.76 | 16.81 | 2.88 |
| 4000.00 | 11.23 | 21.47 | 9.52 | 16.54 | 1.53 | 1.02 | 30.37 | 16.81 | 2.94 |
| 4200.00 | 11.08 | 21.49 | 9.40 | 16.31 | 1.54 | 1.02 | 29.79 | 16.69 | 2.98 |
| 4400.00 | 10.96 | 21.49 | 9.21 | 15.84 | 1.55 | 1.03 | 29.71 | 16.55 | 3.01 |
| 4500.00 | 10.80 | 21.45 | 9.18 | 15.87 | 1.56 | 1.03 | 29.92 | 16.67 | 3.09 |
| 4600.00 | 10.79 | 21.51 | 9.14 | 15.63 | 1.57 | 1.03 | 29.50 | 16.75 | 3.10 |
| 4800.00 | 10.62 | 21.37 | 8.86 | 14.95 | 1.55 | 1.04 | 29.70 | 16.65 | 3.21 |
| 5000.00 | 10.47 | 21.39 | 8.75 | 14.67 | 1.57 | 1.04 | 29.56 | 16.30 | 3.30 |
| 5200.00 | 10.36 | 21.20 | 8.38 | 13.86 | 1.52 | 1.04 | 30.02 | 16.39 | 3.32 |
| 5400.00 | 10.27 | 21.17 | 8.17 | 13.33 | 1.51 | 1.05 | 30.39 | 16.01 | 3.38 |
| 5500.00 | 10.22 | 21.14 | 8.04 | 13.05 | 1.50 | 1.05 | 29.81 | 16.85 | 3.42 |
| 5600.00 | 10.38 | 21.50 | 8.17 | 13.27 | 1.54 | 1.05 | 29.70 | 16.42 | 3.44 |
| 5700.00 | 10.28 | 21.29 | 7.86 | 12.67 | 1.49 | 1.05 | 29.96 | 16.36 | 3.60 |
| 5800.00 | 10.19 | 21.13 | 7.65 | 12.19 | 1.45 | 1.05 | 30.13 | 16.44 | 3.61 |
| 5900.00 | 10.12 | 21.07 | 7.46 | 11.84 | 1.44 | 1.06 | 29.71 | 16.33 | 3.67 |
| 6000.00 | 10.08 | 21.05 | 7.34 | 11.75 | 1.43 | 1.06 | 30.19 | 16.03 | 3.64 |
| 6500.00 | 9.82 | 20.71 | 6.43 | 10.41 | 1.32 | 1.07 | 29.85 | 16.02 | 4.00 |
| 7000.00 | 9.42 | 20.76 | 5.53 | 9.06 | 1.24 | 1.08 | 29.60 | 15.57 | 4.16 |
| 7500.00 | 8.47 | 20.65 | 4.89 | 7.65 | 1.20 | 1.06 | 28.81 | 14.76 | 4.71 |
| 8000.00 | 7.16 | 21.84 | 4.17 | 6.05 | 1.29 | 1.03 | 27.16 | 14.59 | 5.31 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.5V, Id = 89.78 mA @ Temperature = +25degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.99 | 23.46 | 14.72 | 18.18 | 1.14 | 0.76 | 32.93 | 18.58 | 2.21 |
| 80.00 | 17.39 | 22.68 | 17.20 | 18.05 | 1.14 | 0.73 | 34.09 | 18.57 | 2.05 |
| 100.00 | 17.18 | 22.51 | 18.58 | 17.99 | 1.15 | 0.72 | 34.95 | 18.45 | 2.07 |
| 200.00 | 16.80 | 22.25 | 21.95 | 17.96 | 1.18 | 0.71 | 34.60 | 18.55 | 2.01 |
| 400.00 | 16.56 | 22.20 | 22.48 | 17.85 | 1.20 | 0.72 | 35.64 | 18.31 | 2.22 |
| 500.00 | 16.46 | 22.15 | 21.93 | 17.78 | 1.20 | 0.72 | 35.33 | 18.36 | 2.24 |
| 600.00 | 16.36 | 22.17 | 21.15 | 17.66 | 1.21 | 0.73 | 35.54 | 18.34 | 2.18 |
| 800.00 | 16.13 | 22.19 | 19.40 | 17.41 | 1.23 | 0.74 | 35.51 | 18.25 | 2.20 |
| 1000.00 | 15.85 | 22.18 | 17.87 | 17.21 | 1.24 | 0.76 | 35.22 | 18.38 | 2.24 |
| 1200.00 | 15.56 | 22.19 | 16.54 | 17.00 | 1.27 | 0.78 | 35.43 | 18.28 | 2.29 |
| 1400.00 | 15.24 | 22.18 | 15.40 | 16.87 | 1.29 | 0.80 | 36.02 | 18.31 | 2.26 |
| 1500.00 | 15.09 | 22.21 | 14.82 | 16.69 | 1.30 | 0.81 | 35.30 | 18.39 | 2.34 |
| 1600.00 | 14.91 | 22.15 | 14.50 | 16.83 | 1.31 | 0.82 | 35.56 | 18.26 | 2.37 |
| 1800.00 | 14.58 | 22.17 | 13.60 | 16.79 | 1.33 | 0.84 | 36.02 | 18.12 | 2.40 |
| 2000.00 | 14.24 | 22.14 | 13.03 | 17.09 | 1.36 | 0.87 | 36.02 | 18.45 | 2.42 |
| 2200.00 | 13.92 | 22.12 | 12.44 | 17.34 | 1.38 | 0.89 | 35.62 | 18.67 | 2.46 |
| 2400.00 | 13.61 | 22.04 | 11.99 | 17.45 | 1.40 | 0.90 | 35.69 | 18.45 | 2.50 |
| 2500.00 | 13.46 | 22.02 | 11.82 | 17.60 | 1.41 | 0.91 | 35.58 | 18.65 | 2.58 |
| 2600.00 | 13.32 | 22.03 | 11.64 | 17.72 | 1.42 | 0.92 | 35.82 | 18.39 | 2.58 |
| 2800.00 | 13.04 | 21.97 | 11.32 | 17.89 | 1.44 | 0.94 | 35.71 | 18.40 | 2.67 |
| 3000.00 | 12.75 | 21.91 | 11.07 | 17.73 | 1.46 | 0.95 | 35.93 | 18.46 | 2.72 |
| 3200.00 | 12.54 | 21.81 | 10.84 | 18.00 | 1.47 | 0.96 | 35.17 | 18.45 | 2.77 |
| 3400.00 | 12.28 | 21.87 | 10.83 | 18.44 | 1.51 | 0.97 | 35.77 | 18.55 | 2.77 |
| 3500.00 | 12.18 | 21.74 | 10.66 | 18.20 | 1.50 | 0.97 | 35.96 | 18.25 | 2.91 |
| 3600.00 | 12.08 | 21.64 | 10.46 | 17.85 | 1.49 | 0.98 | 35.55 | 18.44 | 2.81 |
| 3800.00 | 11.86 | 21.56 | 10.33 | 17.64 | 1.50 | 0.98 | 36.03 | 18.45 | 2.92 |
| 4000.00 | 11.69 | 21.43 | 10.09 | 17.36 | 1.50 | 0.99 | 35.86 | 18.39 | 3.04 |
| 4200.00 | 11.53 | 21.40 | 9.98 | 17.15 | 1.51 | 0.99 | 35.44 | 18.27 | 3.03 |
| 4400.00 | 11.42 | 21.32 | 9.79 | 16.66 | 1.50 | 1.00 | 36.12 | 18.16 | 3.09 |
| 4500.00 | 11.26 | 21.31 | 9.74 | 16.63 | 1.52 | 1.00 | 35.87 | 18.25 | 3.16 |
| 4600.00 | 11.24 | 21.36 | 9.73 | 16.40 | 1.53 | 1.00 | 35.74 | 18.39 | 3.21 |
| 4800.00 | 11.07 | 21.13 | 9.42 | 15.61 | 1.50 | 1.00 | 35.75 | 18.24 | 3.28 |
| 5000.00 | 10.92 | 21.15 | 9.31 | 15.25 | 1.52 | 1.00 | 36.27 | 17.78 | 3.31 |
| 5200.00 | 10.81 | 20.92 | 8.92 | 14.39 | 1.47 | 1.01 | 35.81 | 17.84 | 3.42 |
| 5400.00 | 10.73 | 20.89 | 8.69 | 13.83 | 1.46 | 1.01 | 35.99 | 17.31 | 3.50 |
| 5500.00 | 10.68 | 20.84 | 8.55 | 13.53 | 1.45 | 1.01 | 35.93 | 18.44 | 3.53 |
| 5600.00 | 10.85 | 21.22 | 8.71 | 13.87 | 1.49 | 1.02 | 35.84 | 17.88 | 3.58 |
| 5700.00 | 10.74 | 20.99 | 8.38 | 13.19 | 1.44 | 1.02 | 35.78 | 17.78 | 3.64 |
| 5800.00 | 10.65 | 20.85 | 8.15 | 12.68 | 1.41 | 1.02 | 35.96 | 17.87 | 3.64 |
| 5900.00 | 10.58 | 20.79 | 7.94 | 12.28 | 1.40 | 1.02 | 36.65 | 17.77 | 3.78 |
| 6000.00 | 10.55 | 20.74 | 7.82 | 12.17 | 1.39 | 1.02 | 36.18 | 17.34 | 3.72 |
| 6500.00 | 10.30 | 20.42 | 6.84 | 10.67 | 1.29 | 1.02 | 36.88 | 17.38 | 4.11 |
| 7000.00 | 9.92 | 20.46 | 5.87 | 9.22 | 1.22 | 1.03 | 36.60 | 16.87 | 4.30 |
| 7500.00 | 8.98 | 20.37 | 5.17 | 7.75 | 1.19 | 1.02 | 36.91 | 15.96 | 4.92 |
| 8000.00 | 7.68 | 21.48 | 4.38 | 6.10 | 1.26 | 0.99 | 33.85 | 16.08 | 5.50 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.3V, Id = 72.42 mA @ Temperature = -45degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.47 | 22.65 | 14.75 | 18.18 | 1.12 | 0.74 | 29.90 | 17.39 | 1.60 |
| 80.00 | 16.83 | 22.16 | 17.04 | 17.93 | 1.14 | 0.73 | 30.87 | 17.49 | 1.60 |
| 100.00 | 16.59 | 21.94 | 18.34 | 17.94 | 1.15 | 0.72 | 30.94 | 17.43 | 1.65 |
| 200.00 | 16.16 | 21.59 | 22.30 | 18.21 | 1.18 | 0.71 | 30.60 | 17.38 | 1.64 |
| 400.00 | 15.91 | 21.55 | 22.39 | 17.01 | 1.20 | 0.71 | 31.64 | 17.20 | 1.85 |
| 500.00 | 15.82 | 21.56 | 21.85 | 16.87 | 1.20 | 0.72 | 31.42 | 17.27 | 1.94 |
| 600.00 | 15.73 | 21.52 | 21.07 | 16.91 | 1.21 | 0.72 | 31.43 | 17.23 | 1.86 |
| 800.00 | 15.54 | 21.56 | 19.59 | 17.09 | 1.22 | 0.74 | 31.73 | 17.22 | 1.87 |
| 1000.00 | 15.32 | 21.55 | 18.29 | 17.05 | 1.24 | 0.75 | 30.93 | 17.26 | 1.85 |
| 1200.00 | 15.06 | 21.54 | 16.94 | 16.60 | 1.26 | 0.76 | 31.81 | 17.27 | 1.88 |
| 1400.00 | 14.78 | 21.57 | 15.59 | 16.17 | 1.28 | 0.78 | 31.94 | 17.25 | 1.87 |
| 1500.00 | 14.65 | 21.61 | 14.95 | 16.02 | 1.29 | 0.79 | 31.61 | 17.27 | 1.93 |
| 1600.00 | 14.49 | 21.59 | 14.64 | 16.26 | 1.30 | 0.80 | 31.99 | 17.24 | 1.96 |
| 1800.00 | 14.21 | 21.60 | 13.82 | 16.40 | 1.32 | 0.83 | 32.14 | 17.18 | 1.96 |
| 2000.00 | 13.91 | 21.57 | 13.23 | 16.74 | 1.34 | 0.85 | 31.90 | 17.30 | 1.96 |
| 2200.00 | 13.62 | 21.59 | 12.57 | 17.01 | 1.36 | 0.87 | 31.97 | 17.41 | 1.97 |
| 2400.00 | 13.35 | 21.55 | 12.19 | 17.29 | 1.38 | 0.89 | 32.22 | 17.32 | 2.03 |
| 2500.00 | 13.22 | 21.56 | 12.01 | 17.55 | 1.39 | 0.90 | 31.92 | 17.39 | 2.05 |
| 2600.00 | 13.09 | 21.54 | 11.92 | 17.86 | 1.40 | 0.91 | 32.12 | 17.33 | 2.09 |
| 2800.00 | 12.84 | 21.52 | 11.72 | 18.37 | 1.43 | 0.92 | 32.15 | 17.31 | 2.21 |
| 3000.00 | 12.60 | 21.45 | 11.51 | 18.35 | 1.44 | 0.93 | 31.98 | 17.35 | 2.19 |
| 3200.00 | 12.41 | 21.39 | 11.30 | 18.77 | 1.45 | 0.94 | 31.44 | 17.31 | 2.19 |
| 3400.00 | 12.15 | 21.49 | 11.26 | 19.03 | 1.50 | 0.95 | 32.13 | 17.31 | 2.20 |
| 3500.00 | 12.06 | 21.43 | 11.07 | 18.68 | 1.49 | 0.96 | 31.84 | 17.13 | 2.32 |
| 3600.00 | 11.99 | 21.30 | 10.79 | 18.23 | 1.47 | 0.96 | 32.36 | 17.26 | 2.17 |
| 3800.00 | 11.79 | 21.24 | 10.69 | 18.29 | 1.49 | 0.97 | 31.94 | 17.26 | 2.31 |
| 4000.00 | 11.63 | 21.14 | 10.43 | 18.23 | 1.49 | 0.97 | 32.62 | 17.19 | 2.43 |
| 4200.00 | 11.48 | 21.19 | 10.26 | 18.01 | 1.51 | 0.98 | 32.03 | 17.11 | 2.33 |
| 4400.00 | 11.35 | 21.17 | 9.97 | 17.18 | 1.51 | 0.99 | 31.90 | 16.95 | 2.41 |
| 4500.00 | 11.20 | 21.14 | 9.79 | 17.05 | 1.52 | 0.99 | 32.06 | 17.04 | 2.44 |
| 4600.00 | 11.16 | 21.21 | 9.69 | 17.02 | 1.53 | 1.00 | 31.69 | 17.11 | 2.54 |
| 4800.00 | 11.02 | 21.06 | 9.25 | 16.24 | 1.51 | 1.00 | 32.06 | 17.02 | 2.58 |
| 5000.00 | 10.85 | 21.07 | 9.13 | 15.87 | 1.52 | 1.01 | 31.56 | 16.72 | 2.70 |
| 5200.00 | 10.72 | 20.96 | 8.84 | 15.08 | 1.50 | 1.01 | 32.34 | 16.66 | 2.70 |
| 5400.00 | 10.74 | 20.93 | 8.74 | 14.56 | 1.48 | 1.02 | 32.39 | 16.30 | 2.76 |
| 5500.00 | 10.67 | 20.85 | 8.67 | 14.33 | 1.47 | 1.01 | 32.32 | 17.08 | 2.79 |
| 5600.00 | 10.81 | 21.23 | 8.88 | 14.97 | 1.52 | 1.02 | 31.98 | 16.77 | 2.86 |
| 5700.00 | 10.79 | 21.09 | 8.59 | 14.19 | 1.48 | 1.02 | 32.14 | 16.63 | 2.85 |
| 5800.00 | 10.71 | 20.91 | 8.52 | 13.59 | 1.45 | 1.02 | 32.29 | 16.72 | 2.82 |
| 5900.00 | 10.66 | 20.77 | 8.49 | 13.23 | 1.43 | 1.01 | 32.09 | 16.73 | 2.92 |
| 6000.00 | 10.64 | 20.73 | 8.34 | 12.95 | 1.42 | 1.01 | 32.42 | 16.35 | 2.93 |
| 6500.00 | 10.53 | 20.35 | 7.51 | 11.41 | 1.32 | 1.01 | 31.97 | 16.37 | 3.17 |
| 7000.00 | 10.16 | 20.57 | 6.02 | 9.62 | 1.24 | 1.03 | 31.49 | 15.88 | 3.41 |
| 7500.00 | 9.32 | 20.46 | 4.91 | 8.19 | 1.16 | 1.05 | 30.31 | 15.01 | 3.87 |
| 8000.00 | 8.19 | 21.57 | 4.20 | 6.58 | 1.23 | 1.03 | 29.32 | 15.17 | 4.39 |

## Typical Performance Data

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.1V, Id = 59.08 mA @ Temperature = -45degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.02 | 22.37 | 14.10 | 18.29 | 1.13 | 0.75 | 27.07 | 16.20 | 1.55 |
| 80.00 | 16.40 | 21.72 | 16.41 | 19.09 | 1.15 | 0.73 | 27.44 | 16.29 | 1.55 |
| 100.00 | 16.16 | 21.51 | 17.64 | 19.61 | 1.16 | 0.73 | 27.44 | 16.24 | 1.63 |
| 200.00 | 15.74 | 21.17 | 21.53 | 20.94 | 1.18 | 0.72 | 27.00 | 16.18 | 1.65 |
| 400.00 | 15.50 | 21.13 | 22.56 | 19.66 | 1.20 | 0.72 | 27.89 | 16.01 | 1.86 |
| 500.00 | 15.42 | 21.09 | 22.14 | 19.45 | 1.20 | 0.72 | 27.89 | 16.07 | 1.92 |
| 600.00 | 15.33 | 21.07 | 21.31 | 19.48 | 1.21 | 0.73 | 27.68 | 16.01 | 1.81 |
| 800.00 | 15.15 | 21.12 | 19.70 | 19.61 | 1.22 | 0.75 | 27.95 | 16.03 | 1.82 |
| 1000.00 | 14.94 | 21.11 | 18.34 | 19.44 | 1.24 | 0.76 | 27.12 | 16.04 | 1.73 |
| 1200.00 | 14.69 | 21.13 | 17.06 | 18.70 | 1.26 | 0.78 | 28.19 | 16.08 | 1.88 |
| 1400.00 | 14.42 | 21.17 | 15.66 | 18.05 | 1.28 | 0.80 | 28.02 | 16.06 | 1.87 |
| 1500.00 | 14.29 | 21.19 | 15.01 | 17.75 | 1.28 | 0.81 | 27.84 | 16.08 | 1.94 |
| 1600.00 | 14.14 | 21.21 | 14.64 | 17.94 | 1.30 | 0.82 | 28.23 | 16.07 | 1.94 |
| 1800.00 | 13.87 | 21.22 | 13.78 | 17.94 | 1.31 | 0.84 | 28.27 | 15.99 | 1.96 |
| 2000.00 | 13.58 | 21.28 | 13.14 | 18.12 | 1.34 | 0.86 | 28.03 | 16.13 | 1.96 |
| 2200.00 | 13.29 | 21.30 | 12.42 | 18.21 | 1.36 | 0.89 | 28.16 | 16.24 | 1.97 |
| 2400.00 | 13.02 | 21.33 | 12.01 | 18.23 | 1.38 | 0.91 | 28.40 | 16.15 | 2.03 |
| 2500.00 | 12.89 | 21.32 | 11.80 | 18.37 | 1.39 | 0.92 | 27.94 | 16.22 | 2.05 |
| 2600.00 | 12.76 | 21.32 | 11.67 | 18.56 | 1.40 | 0.92 | 28.24 | 16.17 | 2.06 |
| 2800.00 | 12.52 | 21.33 | 11.46 | 18.76 | 1.43 | 0.94 | 28.32 | 16.12 | 2.20 |
| 3000.00 | 12.28 | 21.32 | 11.21 | 18.58 | 1.45 | 0.95 | 28.07 | 16.16 | 2.18 |
| 3200.00 | 12.09 | 21.26 | 10.97 | 18.74 | 1.46 | 0.96 | 27.62 | 16.10 | 2.14 |
| 3400.00 | 11.84 | 21.45 | 10.92 | 18.92 | 1.52 | 0.97 | 28.24 | 16.12 | 2.17 |
| 3500.00 | 11.75 | 21.38 | 10.73 | 18.47 | 1.51 | 0.98 | 28.06 | 15.93 | 2.27 |
| 3600.00 | 11.68 | 21.29 | 10.47 | 17.97 | 1.49 | 0.98 | 28.50 | 16.03 | 2.13 |
| 3800.00 | 11.49 | 21.23 | 10.33 | 17.97 | 1.51 | 0.99 | 28.11 | 16.05 | 2.30 |
| 4000.00 | 11.34 | 21.17 | 10.10 | 17.84 | 1.51 | 0.99 | 28.84 | 15.99 | 2.34 |
| 4200.00 | 11.19 | 21.22 | 9.91 | 17.64 | 1.53 | 1.00 | 28.22 | 15.88 | 2.40 |
| 4400.00 | 11.06 | 21.28 | 9.64 | 16.86 | 1.54 | 1.01 | 27.93 | 15.81 | 2.38 |
| 4500.00 | 10.91 | 21.23 | 9.48 | 16.77 | 1.55 | 1.01 | 28.36 | 15.89 | 2.40 |
| 4600.00 | 10.88 | 21.31 | 9.36 | 16.72 | 1.56 | 1.02 | 27.90 | 15.96 | 2.52 |
| 4800.00 | 10.73 | 21.22 | 8.93 | 16.01 | 1.54 | 1.03 | 28.20 | 15.88 | 2.57 |
| 5000.00 | 10.56 | 21.25 | 8.81 | 15.68 | 1.56 | 1.03 | 27.76 | 15.61 | 2.57 |
| 5200.00 | 10.42 | 21.15 | 8.53 | 14.86 | 1.54 | 1.04 | 28.52 | 15.62 | 2.65 |
| 5400.00 | 10.45 | 21.14 | 8.41 | 14.24 | 1.51 | 1.04 | 28.57 | 15.31 | 2.67 |
| 5500.00 | 10.38 | 21.08 | 8.35 | 14.04 | 1.51 | 1.04 | 28.54 | 16.06 | 2.80 |
| 5600.00 | 10.51 | 21.49 | 8.53 | 14.59 | 1.57 | 1.04 | 28.14 | 15.66 | 2.78 |
| 5700.00 | 10.49 | 21.32 | 8.23 | 13.80 | 1.51 | 1.05 | 28.39 | 15.60 | 2.81 |
| 5800.00 | 10.41 | 21.12 | 8.16 | 13.24 | 1.48 | 1.04 | 28.60 | 15.72 | 2.89 |
| 5900.00 | 10.37 | 20.98 | 8.14 | 12.92 | 1.46 | 1.04 | 28.11 | 15.66 | 2.87 |
| 6000.00 | 10.35 | 20.94 | 8.02 | 12.68 | 1.45 | 1.04 | 28.47 | 15.35 | 2.85 |
| 6500.00 | 10.24 | 20.60 | 7.23 | 11.27 | 1.34 | 1.04 | 28.20 | 15.35 | 3.17 |
| 7000.00 | 9.86 | 20.81 | 5.80 | 9.57 | 1.26 | 1.06 | 27.92 | 14.94 | 3.27 |
| 7500.00 | 9.01 | 20.74 | 4.73 | 8.18 | 1.18 | 1.09 | 26.91 | 14.22 | 3.84 |
| 8000.00 | 7.85 | 21.82 | 4.06 | 6.59 | 1.25 | 1.06 | 26.07 | 14.08 | 4.34 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.5V, Id = 85.73 mA @ Temperature = -45degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.75 | 23.27 | 15.29 | 17.58 | 1.14 | 0.76 | 30.56 | 18.40 | 1.72 |
| 80.00 | 17.10 | 22.44 | 17.40 | 16.93 | 1.14 | 0.72 | 32.45 | 18.52 | 1.66 |
| 100.00 | 16.86 | 22.22 | 18.61 | 16.84 | 1.15 | 0.72 | 33.19 | 18.46 | 1.67 |
| 200.00 | 16.43 | 21.89 | 22.41 | 16.80 | 1.18 | 0.70 | 33.85 | 18.44 | 1.57 |
| 400.00 | 16.16 | 21.85 | 21.95 | 15.72 | 1.20 | 0.70 | 34.93 | 18.21 | 1.87 |
| 500.00 | 16.07 | 21.85 | 21.38 | 15.62 | 1.20 | 0.71 | 34.97 | 18.29 | 1.93 |
| 600.00 | 15.98 | 21.82 | 20.71 | 15.67 | 1.21 | 0.71 | 35.13 | 18.26 | 1.85 |
| 800.00 | 15.79 | 21.81 | 19.36 | 15.86 | 1.22 | 0.73 | 35.08 | 18.25 | 1.93 |
| 1000.00 | 15.56 | 21.83 | 18.15 | 15.86 | 1.24 | 0.74 | 34.70 | 18.32 | 1.83 |
| 1200.00 | 15.29 | 21.81 | 16.81 | 15.52 | 1.26 | 0.76 | 35.25 | 18.29 | 1.86 |
| 1400.00 | 15.00 | 21.81 | 15.49 | 15.21 | 1.28 | 0.77 | 35.88 | 18.27 | 1.84 |
| 1500.00 | 14.87 | 21.82 | 14.87 | 15.09 | 1.29 | 0.78 | 35.13 | 18.29 | 1.97 |
| 1600.00 | 14.71 | 21.81 | 14.59 | 15.37 | 1.30 | 0.80 | 35.41 | 18.23 | 1.96 |
| 1800.00 | 14.43 | 21.80 | 13.82 | 15.56 | 1.32 | 0.82 | 35.78 | 18.16 | 1.93 |
| 2000.00 | 14.13 | 21.78 | 13.28 | 15.96 | 1.34 | 0.84 | 35.44 | 18.31 | 1.96 |
| 2200.00 | 13.83 | 21.74 | 12.67 | 16.26 | 1.36 | 0.86 | 35.34 | 18.45 | 1.99 |
| 2400.00 | 13.55 | 21.71 | 12.31 | 16.69 | 1.38 | 0.88 | 35.45 | 18.32 | 2.05 |
| 2500.00 | 13.43 | 21.73 | 12.15 | 16.97 | 1.39 | 0.89 | 35.42 | 18.44 | 2.06 |
| 2600.00 | 13.29 | 21.68 | 12.05 | 17.34 | 1.40 | 0.90 | 35.62 | 18.31 | 2.14 |
| 2800.00 | 13.05 | 21.64 | 11.90 | 17.97 | 1.42 | 0.91 | 35.58 | 18.30 | 2.13 |
| 3000.00 | 12.80 | 21.56 | 11.69 | 18.08 | 1.44 | 0.92 | 35.63 | 18.37 | 2.16 |
| 3200.00 | 12.61 | 21.44 | 11.50 | 18.63 | 1.44 | 0.93 | 34.81 | 18.36 | 2.23 |
| 3400.00 | 12.34 | 21.51 | 11.50 | 18.94 | 1.49 | 0.94 | 35.31 | 18.37 | 2.21 |
| 3500.00 | 12.26 | 21.43 | 11.29 | 18.62 | 1.48 | 0.94 | 35.38 | 18.16 | 2.32 |
| 3600.00 | 12.18 | 21.31 | 11.02 | 18.24 | 1.46 | 0.95 | 35.57 | 18.31 | 2.25 |
| 3800.00 | 11.98 | 21.23 | 10.93 | 18.36 | 1.48 | 0.95 | 35.52 | 18.30 | 2.32 |
| 4000.00 | 11.82 | 21.13 | 10.66 | 18.30 | 1.48 | 0.96 | 35.70 | 18.25 | 2.46 |
| 4200.00 | 11.67 | 21.13 | 10.49 | 18.05 | 1.49 | 0.97 | 35.47 | 18.14 | 2.37 |
| 4400.00 | 11.54 | 21.10 | 10.19 | 17.28 | 1.49 | 0.97 | 35.44 | 18.00 | 2.47 |
| 4500.00 | 11.38 | 21.07 | 9.99 | 17.13 | 1.50 | 0.98 | 35.29 | 18.04 | 2.55 |
| 4600.00 | 11.35 | 21.13 | 9.90 | 17.12 | 1.51 | 0.98 | 35.31 | 18.13 | 2.67 |
| 4800.00 | 11.20 | 20.96 | 9.44 | 16.32 | 1.48 | 0.99 | 35.21 | 17.99 | 2.63 |
| 5000.00 | 11.04 | 20.98 | 9.32 | 15.94 | 1.50 | 0.99 | 35.36 | 17.63 | 2.64 |
| 5200.00 | 10.91 | 20.85 | 9.11 | 15.17 | 1.48 | 0.99 | 35.65 | 17.54 | 2.73 |
| 5400.00 | 10.93 | 20.82 | 8.94 | 14.71 | 1.46 | 1.00 | 35.78 | 17.09 | 2.80 |
| 5500.00 | 10.85 | 20.73 | 8.89 | 14.47 | 1.45 | 1.00 | 35.50 | 17.99 | 2.82 |
| 5600.00 | 10.99 | 21.09 | 9.08 | 15.18 | 1.49 | 1.00 | 35.53 | 17.61 | 2.87 |
| 5700.00 | 10.95 | 20.93 | 8.77 | 14.40 | 1.45 | 1.01 | 35.64 | 17.44 | 2.89 |
| 5800.00 | 10.91 | 20.76 | 8.81 | 13.79 | 1.43 | 1.00 | 35.66 | 17.54 | 2.85 |
| 5900.00 | 10.84 | 20.61 | 8.75 | 13.38 | 1.41 | 0.99 | 35.84 | 17.56 | 2.94 |
| 6000.00 | 10.83 | 20.56 | 8.58 | 13.10 | 1.39 | 0.99 | 36.27 | 17.12 | 3.02 |
| 6500.00 | 10.72 | 20.20 | 7.71 | 11.50 | 1.30 | 0.98 | 36.43 | 17.17 | 3.19 |
| 7000.00 | 10.35 | 20.42 | 6.17 | 9.62 | 1.23 | 1.01 | 36.23 | 16.59 | 3.57 |
| 7500.00 | 9.52 | 20.31 | 5.06 | 8.21 | 1.16 | 1.03 | 34.67 | 15.72 | 4.02 |
| 8000.00 | 8.41 | 21.39 | 4.28 | 6.56 | 1.21 | 1.01 | 33.16 | 15.91 | 4.55 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.3V, Id = 79.42 mA @ Temperature = +85degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.91 | 23.43 | 13.47 | 18.47 | 1.14 | 0.76 | 31.54 | 17.84 | 2.67 |
| 80.00 | 17.37 | 22.70 | 16.00 | 19.99 | 1.15 | 0.74 | 32.37 | 17.84 | 2.42 |
| 100.00 | 17.18 | 22.51 | 17.27 | 20.54 | 1.16 | 0.73 | 32.60 | 17.70 | 2.42 |
| 200.00 | 16.84 | 22.30 | 19.98 | 21.00 | 1.18 | 0.73 | 32.29 | 17.84 | 2.26 |
| 400.00 | 16.61 | 22.24 | 19.85 | 21.60 | 1.19 | 0.74 | 32.95 | 17.63 | 2.51 |
| 500.00 | 16.51 | 22.23 | 19.46 | 21.92 | 1.20 | 0.74 | 32.80 | 17.69 | 2.55 |
| 600.00 | 16.39 | 22.24 | 19.01 | 21.77 | 1.21 | 0.75 | 32.81 | 17.67 | 2.49 |
| 800.00 | 16.15 | 22.21 | 17.89 | 21.28 | 1.22 | 0.77 | 33.14 | 17.59 | 2.48 |
| 1000.00 | 15.86 | 22.22 | 16.83 | 20.82 | 1.24 | 0.79 | 32.55 | 17.72 | 2.52 |
| 1200.00 | 15.54 | 22.21 | 15.78 | 20.21 | 1.26 | 0.81 | 33.22 | 17.64 | 2.54 |
| 1400.00 | 15.20 | 22.26 | 14.81 | 19.59 | 1.29 | 0.83 | 33.28 | 17.65 | 2.61 |
| 1500.00 | 15.03 | 22.24 | 14.35 | 19.08 | 1.30 | 0.84 | 32.95 | 17.77 | 2.65 |
| 1600.00 | 14.85 | 22.20 | 13.96 | 18.98 | 1.31 | 0.85 | 33.26 | 17.64 | 2.66 |
| 1800.00 | 14.49 | 22.25 | 13.14 | 18.38 | 1.34 | 0.87 | 33.33 | 17.49 | 2.72 |
| 2000.00 | 14.12 | 22.22 | 12.52 | 18.09 | 1.36 | 0.90 | 33.42 | 17.82 | 2.75 |
| 2200.00 | 13.77 | 22.23 | 11.92 | 17.79 | 1.39 | 0.92 | 33.03 | 18.03 | 2.83 |
| 2400.00 | 13.44 | 22.18 | 11.39 | 17.41 | 1.41 | 0.94 | 33.36 | 17.84 | 2.89 |
| 2500.00 | 13.27 | 22.22 | 11.21 | 17.34 | 1.43 | 0.95 | 33.16 | 18.00 | 2.94 |
| 2600.00 | 13.11 | 22.18 | 10.99 | 17.26 | 1.43 | 0.95 | 33.47 | 17.76 | 3.03 |
| 2800.00 | 12.81 | 22.13 | 10.63 | 17.04 | 1.45 | 0.97 | 33.44 | 17.77 | 3.17 |
| 3000.00 | 12.51 | 22.05 | 10.33 | 16.73 | 1.46 | 0.98 | 33.22 | 17.81 | 3.15 |
| 3200.00 | 12.27 | 22.02 | 10.09 | 16.78 | 1.48 | 0.99 | 32.88 | 17.79 | 3.27 |
| 3400.00 | 12.01 | 22.05 | 10.01 | 16.96 | 1.52 | 1.00 | 33.21 | 17.93 | 3.26 |
| 3500.00 | 11.88 | 21.98 | 9.89 | 16.85 | 1.52 | 1.01 | 33.32 | 17.59 | 3.36 |
| 3600.00 | 11.78 | 21.82 | 9.71 | 16.56 | 1.50 | 1.01 | 33.28 | 17.81 | 3.28 |
| 3800.00 | 11.56 | 21.76 | 9.62 | 16.38 | 1.52 | 1.01 | 33.32 | 17.82 | 3.48 |
| 4000.00 | 11.38 | 21.62 | 9.44 | 16.11 | 1.52 | 1.02 | 33.45 | 17.80 | 3.57 |
| 4200.00 | 11.23 | 21.65 | 9.40 | 15.86 | 1.54 | 1.02 | 33.21 | 17.64 | 3.56 |
| 4400.00 | 11.11 | 21.53 | 9.29 | 15.39 | 1.53 | 1.02 | 33.42 | 17.50 | 3.58 |
| 4500.00 | 10.95 | 21.52 | 9.32 | 15.44 | 1.55 | 1.02 | 33.34 | 17.64 | 3.62 |
| 4600.00 | 10.95 | 21.52 | 9.27 | 15.09 | 1.54 | 1.02 | 33.36 | 17.77 | 3.66 |
| 4800.00 | 10.77 | 21.24 | 9.08 | 14.40 | 1.51 | 1.02 | 33.16 | 17.61 | 3.77 |
| 5000.00 | 10.61 | 21.18 | 8.86 | 13.89 | 1.51 | 1.02 | 33.46 | 17.15 | 3.82 |
| 5200.00 | 10.46 | 21.03 | 8.62 | 13.26 | 1.49 | 1.02 | 33.42 | 17.30 | 3.94 |
| 5400.00 | 10.38 | 20.95 | 8.20 | 12.44 | 1.45 | 1.03 | 33.78 | 16.78 | 4.03 |
| 5500.00 | 10.30 | 20.99 | 8.13 | 12.38 | 1.46 | 1.03 | 33.18 | 17.86 | 4.12 |
| 5600.00 | 10.43 | 21.30 | 8.08 | 12.33 | 1.48 | 1.04 | 33.55 | 17.28 | 4.22 |
| 5700.00 | 10.24 | 20.98 | 7.73 | 11.69 | 1.43 | 1.03 | 33.57 | 17.27 | 4.27 |
| 5800.00 | 10.22 | 20.98 | 7.54 | 11.38 | 1.41 | 1.04 | 33.52 | 17.31 | 4.30 |
| 5900.00 | 10.12 | 20.94 | 7.33 | 11.13 | 1.40 | 1.04 | 33.69 | 17.15 | 4.39 |
| 6000.00 | 10.09 | 20.88 | 7.17 | 11.00 | 1.38 | 1.05 | 33.76 | 16.79 | 4.48 |
| 6500.00 | 9.69 | 20.68 | 6.16 | 9.70 | 1.28 | 1.06 | 33.72 | 16.82 | 4.82 |
| 7000.00 | 9.25 | 20.68 | 5.47 | 8.62 | 1.23 | 1.07 | 33.43 | 16.43 | 4.99 |
| 7500.00 | 8.27 | 20.46 | 5.08 | 7.27 | 1.20 | 1.04 | 33.04 | 15.58 | 5.56 |
| 8000.00 | 6.79 | 21.17 | 4.56 | 5.94 | 1.33 | 0.98 | 30.78 | 15.35 | 6.25 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.1V, Id = 66.22 mA @ Temperature = +85degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 17.56 | 22.94 | 13.04 | 17.99 | 1.13 | 0.75 | 29.47 | 17.03 | 2.56 |
| 80.00 | 17.03 | 22.36 | 15.29 | 20.39 | 1.15 | 0.74 | 30.06 | 17.11 | 2.37 |
| 100.00 | 16.85 | 22.17 | 16.49 | 21.51 | 1.16 | 0.73 | 30.07 | 17.03 | 2.36 |
| 200.00 | 16.51 | 21.98 | 19.00 | 23.30 | 1.18 | 0.73 | 29.90 | 17.12 | 2.21 |
| 400.00 | 16.28 | 21.95 | 18.90 | 24.25 | 1.20 | 0.74 | 30.46 | 16.94 | 2.46 |
| 500.00 | 16.19 | 21.91 | 18.56 | 24.63 | 1.20 | 0.75 | 30.37 | 17.02 | 2.55 |
| 600.00 | 16.08 | 21.91 | 18.19 | 24.38 | 1.21 | 0.76 | 30.37 | 17.00 | 2.47 |
| 800.00 | 15.84 | 21.91 | 17.23 | 23.53 | 1.22 | 0.77 | 30.59 | 16.95 | 2.47 |
| 1000.00 | 15.56 | 21.93 | 16.34 | 22.68 | 1.24 | 0.80 | 29.92 | 17.06 | 2.45 |
| 1200.00 | 15.25 | 21.90 | 15.34 | 21.71 | 1.26 | 0.81 | 30.77 | 17.01 | 2.54 |
| 1400.00 | 14.91 | 21.93 | 14.45 | 20.75 | 1.28 | 0.84 | 30.75 | 17.03 | 2.60 |
| 1500.00 | 14.75 | 21.94 | 14.00 | 20.08 | 1.29 | 0.85 | 30.44 | 17.11 | 2.63 |
| 1600.00 | 14.57 | 21.94 | 13.65 | 19.83 | 1.31 | 0.86 | 30.81 | 17.00 | 2.64 |
| 1800.00 | 14.21 | 21.97 | 12.84 | 18.99 | 1.33 | 0.88 | 31.07 | 16.89 | 2.66 |
| 2000.00 | 13.85 | 21.99 | 12.22 | 18.48 | 1.36 | 0.91 | 30.91 | 17.15 | 2.73 |
| 2200.00 | 13.50 | 22.03 | 11.63 | 17.96 | 1.39 | 0.93 | 30.67 | 17.32 | 2.78 |
| 2400.00 | 13.17 | 22.01 | 11.11 | 17.41 | 1.41 | 0.95 | 31.04 | 17.14 | 2.88 |
| 2500.00 | 13.01 | 22.03 | 10.91 | 17.26 | 1.42 | 0.96 | 30.63 | 17.26 | 2.91 |
| 2600.00 | 12.85 | 22.00 | 10.69 | 17.10 | 1.43 | 0.97 | 31.07 | 17.10 | 2.99 |
| 2800.00 | 12.55 | 21.99 | 10.33 | 16.75 | 1.45 | 0.98 | 31.06 | 17.10 | 3.13 |
| 3000.00 | 12.25 | 21.95 | 10.03 | 16.39 | 1.47 | 0.99 | 30.91 | 17.14 | 3.10 |
| 3200.00 | 12.00 | 21.93 | 9.78 | 16.32 | 1.48 | 1.01 | 30.27 | 17.11 | 3.18 |
| 3400.00 | 11.75 | 22.01 | 9.69 | 16.43 | 1.53 | 1.02 | 30.88 | 17.16 | 3.20 |
| 3500.00 | 11.63 | 21.93 | 9.57 | 16.32 | 1.53 | 1.02 | 30.89 | 16.91 | 3.32 |
| 3600.00 | 11.53 | 21.83 | 9.40 | 16.03 | 1.52 | 1.02 | 31.05 | 17.11 | 3.28 |
| 3800.00 | 11.31 | 21.77 | 9.31 | 15.86 | 1.53 | 1.03 | 31.02 | 17.06 | 3.37 |
| 4000.00 | 11.13 | 21.67 | 9.12 | 15.59 | 1.53 | 1.03 | 31.30 | 17.03 | 3.55 |
| 4200.00 | 10.98 | 21.69 | 9.09 | 15.36 | 1.55 | 1.04 | 30.97 | 16.91 | 3.53 |
| 4400.00 | 10.86 | 21.61 | 8.97 | 14.91 | 1.55 | 1.04 | 30.86 | 16.77 | 3.46 |
| 4500.00 | 10.70 | 21.61 | 9.02 | 15.00 | 1.58 | 1.04 | 31.14 | 16.90 | 3.62 |
| 4600.00 | 10.70 | 21.61 | 8.95 | 14.64 | 1.57 | 1.04 | 30.69 | 16.98 | 3.58 |
| 4800.00 | 10.52 | 21.36 | 8.75 | 14.04 | 1.54 | 1.04 | 30.86 | 16.87 | 3.73 |
| 5000.00 | 10.37 | 21.31 | 8.55 | 13.54 | 1.54 | 1.04 | 30.92 | 16.48 | 3.78 |
| 5200.00 | 10.21 | 21.12 | 8.31 | 12.94 | 1.51 | 1.04 | 31.25 | 16.62 | 3.90 |
| 5400.00 | 10.13 | 21.06 | 7.93 | 12.20 | 1.47 | 1.04 | 31.63 | 16.17 | 4.01 |
| 5500.00 | 10.06 | 21.13 | 7.86 | 12.14 | 1.49 | 1.05 | 30.80 | 17.06 | 4.04 |
| 5600.00 | 10.18 | 21.44 | 7.81 | 12.07 | 1.50 | 1.05 | 30.94 | 16.57 | 4.12 |
| 5700.00 | 9.99 | 21.13 | 7.46 | 11.46 | 1.45 | 1.05 | 31.06 | 16.55 | 4.16 |
| 5800.00 | 9.97 | 21.18 | 7.29 | 11.17 | 1.44 | 1.06 | 31.08 | 16.61 | 4.18 |
| 5900.00 | 9.86 | 21.08 | 7.10 | 10.94 | 1.42 | 1.06 | 30.98 | 16.44 | 4.38 |
| 6000.00 | 9.83 | 21.06 | 6.93 | 10.82 | 1.40 | 1.06 | 31.36 | 16.15 | 4.34 |
| 6500.00 | 9.43 | 20.82 | 5.97 | 9.55 | 1.29 | 1.08 | 30.81 | 16.12 | 4.71 |
| 7000.00 | 8.98 | 20.83 | 5.31 | 8.53 | 1.24 | 1.09 | 30.56 | 15.76 | 4.97 |
| 7500.00 | 7.99 | 20.56 | 4.95 | 7.22 | 1.21 | 1.05 | 29.92 | 14.97 | 5.42 |
| 8000.00 | 6.51 | 21.40 | 4.45 | 5.90 | 1.36 | 1.00 | 27.77 | 14.56 | 6.15 |

## *Typical Performance Data*

**Definitions:**
Input Return Loss = -S11 (dB)
Gain(Power Gain) = S21 (dB)
Reverse Isolation = -S12 (dB)
Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 3.5V, Id = 92.41mA @ Temperature = +85degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 50.00 | 18.15 | 23.54 | 14.01 | 18.37 | 1.13 | 0.75 | 32.06 | 18.27 | 2.80 |
| 80.00 | 17.59 | 22.89 | 16.49 | 19.39 | 1.15 | 0.73 | 33.38 | 18.21 | 2.53 |
| 100.00 | 17.41 | 22.77 | 17.83 | 19.66 | 1.16 | 0.73 | 34.08 | 18.05 | 2.50 |
| 200.00 | 17.06 | 22.52 | 20.66 | 19.71 | 1.18 | 0.72 | 34.12 | 18.21 | 2.34 |
| 400.00 | 16.82 | 22.43 | 20.49 | 20.23 | 1.19 | 0.73 | 34.78 | 17.98 | 2.52 |
| 500.00 | 16.72 | 22.44 | 20.08 | 20.46 | 1.20 | 0.74 | 34.79 | 18.03 | 2.54 |
| 600.00 | 16.60 | 22.46 | 19.54 | 20.37 | 1.21 | 0.75 | 34.48 | 18.03 | 2.49 |
| 800.00 | 16.35 | 22.43 | 18.32 | 20.06 | 1.23 | 0.76 | 34.77 | 17.91 | 2.57 |
| 1000.00 | 16.05 | 22.45 | 17.19 | 19.74 | 1.25 | 0.78 | 34.59 | 18.09 | 2.55 |
| 1200.00 | 15.73 | 22.42 | 16.06 | 19.28 | 1.27 | 0.80 | 34.38 | 17.99 | 2.58 |
| 1400.00 | 15.39 | 22.40 | 15.07 | 18.84 | 1.29 | 0.82 | 34.92 | 18.02 | 2.64 |
| 1500.00 | 15.22 | 22.44 | 14.58 | 18.42 | 1.31 | 0.83 | 34.41 | 18.15 | 2.70 |
| 1600.00 | 15.03 | 22.39 | 14.20 | 18.37 | 1.31 | 0.84 | 34.52 | 17.99 | 2.72 |
| 1800.00 | 14.67 | 22.37 | 13.35 | 17.92 | 1.34 | 0.87 | 34.77 | 17.82 | 2.77 |
| 2000.00 | 14.30 | 22.35 | 12.72 | 17.79 | 1.36 | 0.89 | 34.90 | 18.22 | 2.76 |
| 2200.00 | 13.95 | 22.32 | 12.13 | 17.57 | 1.39 | 0.91 | 34.34 | 18.47 | 2.82 |
| 2400.00 | 13.61 | 22.30 | 11.60 | 17.35 | 1.41 | 0.93 | 34.53 | 18.22 | 2.92 |
| 2500.00 | 13.45 | 22.28 | 11.42 | 17.29 | 1.42 | 0.94 | 34.46 | 18.42 | 2.98 |
| 2600.00 | 13.29 | 22.25 | 11.21 | 17.28 | 1.43 | 0.94 | 34.59 | 18.15 | 3.07 |
| 2800.00 | 12.99 | 22.18 | 10.85 | 17.14 | 1.44 | 0.96 | 34.43 | 18.16 | 3.12 |
| 3000.00 | 12.68 | 22.11 | 10.56 | 16.90 | 1.46 | 0.97 | 34.37 | 18.21 | 3.18 |
| 3200.00 | 12.44 | 22.07 | 10.31 | 17.02 | 1.48 | 0.98 | 33.89 | 18.20 | 3.24 |
| 3400.00 | 12.18 | 22.09 | 10.24 | 17.29 | 1.52 | 0.99 | 34.34 | 18.35 | 3.27 |
| 3500.00 | 12.05 | 22.01 | 10.12 | 17.14 | 1.52 | 1.00 | 34.22 | 17.98 | 3.37 |
| 3600.00 | 11.95 | 21.85 | 9.94 | 16.87 | 1.50 | 1.00 | 34.11 | 18.19 | 3.33 |
| 3800.00 | 11.73 | 21.77 | 9.85 | 16.68 | 1.51 | 1.00 | 34.28 | 18.25 | 3.51 |
| 4000.00 | 11.54 | 21.63 | 9.66 | 16.39 | 1.51 | 1.01 | 34.10 | 18.20 | 3.62 |
| 4200.00 | 11.39 | 21.57 | 9.62 | 16.17 | 1.52 | 1.01 | 34.16 | 18.07 | 3.61 |
| 4400.00 | 11.28 | 21.51 | 9.51 | 15.68 | 1.52 | 1.01 | 34.38 | 17.93 | 3.66 |
| 4500.00 | 11.11 | 21.47 | 9.56 | 15.69 | 1.54 | 1.01 | 34.49 | 18.07 | 3.75 |
| 4600.00 | 11.11 | 21.46 | 9.50 | 15.35 | 1.53 | 1.01 | 34.31 | 18.27 | 3.80 |
| 4800.00 | 10.93 | 21.21 | 9.29 | 14.62 | 1.50 | 1.01 | 34.37 | 18.09 | 3.91 |
| 5000.00 | 10.77 | 21.10 | 9.10 | 14.10 | 1.50 | 1.01 | 34.48 | 17.57 | 3.93 |
| 5200.00 | 10.62 | 20.97 | 8.84 | 13.42 | 1.48 | 1.01 | 34.32 | 17.74 | 4.01 |
| 5400.00 | 10.54 | 20.82 | 8.40 | 12.58 | 1.43 | 1.01 | 34.07 | 17.19 | 4.09 |
| 5500.00 | 10.47 | 20.93 | 8.34 | 12.50 | 1.45 | 1.02 | 34.43 | 18.40 | 4.18 |
| 5600.00 | 10.59 | 21.18 | 8.30 | 12.48 | 1.46 | 1.02 | 34.58 | 17.75 | 4.31 |
| 5700.00 | 10.41 | 20.89 | 7.94 | 11.84 | 1.42 | 1.02 | 34.40 | 17.73 | 4.39 |
| 5800.00 | 10.39 | 20.88 | 7.74 | 11.49 | 1.40 | 1.02 | 34.38 | 17.80 | 4.31 |
| 5900.00 | 10.29 | 20.79 | 7.52 | 11.23 | 1.38 | 1.03 | 34.52 | 17.62 | 4.53 |
| 6000.00 | 10.26 | 20.79 | 7.35 | 11.11 | 1.37 | 1.03 | 34.20 | 17.20 | 4.47 |
| 6500.00 | 9.87 | 20.55 | 6.32 | 9.76 | 1.27 | 1.05 | 34.39 | 17.27 | 4.89 |
| 7000.00 | 9.43 | 20.55 | 5.60 | 8.67 | 1.22 | 1.05 | 34.38 | 16.85 | 5.19 |
| 7500.00 | 8.45 | 20.31 | 5.19 | 7.30 | 1.18 | 1.02 | 34.63 | 16.04 | 5.64 |
| 8000.00 | 6.98 | 21.02 | 4.65 | 5.95 | 1.31 | 0.97 | 33.66 | 15.88 | 6.36 |