

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 = 3V, Rbias=681 ohms, Id=60 mA @ Temperature = +25degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | Noise Figure | FREQ | 1dB Comp. Output (1) | |
|--------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|--------------|--------|----------------------|--------------------|
| | | | | | K | Measure | | | | Current Limit 70mA | Current Limit 80mA |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dB) | (MHz) | (dBm) | |
| 50.0 | 24.40 | 33.24 | 11.30 | 10.09 | 1.41 | 0.79 | 32.38 | 1.89 | 50.0 | 19.00 | 19.00 |
| 100.0 | 25.46 | 30.91 | 12.06 | 13.80 | 1.12 | 0.72 | 31.73 | 1.05 | 100.0 | 18.98 | 18.99 |
| 200.0 | 25.46 | 30.09 | 11.05 | 17.77 | 1.04 | 0.75 | 32.68 | 0.68 | 200.0 | 19.26 | 19.26 |
| 300.0 | 24.91 | 29.61 | 9.60 | 19.23 | 1.01 | 0.80 | 32.93 | 0.65 | 300.0 | 19.28 | 19.28 |
| 500.0 | 23.39 | 28.61 | 7.67 | 20.06 | 0.99 | 0.90 | 33.10 | 0.66 | 500.0 | 19.34 | 19.34 |
| 600.0 | 22.59 | 28.17 | 7.09 | 20.13 | 0.99 | 0.94 | 33.85 | 0.66 | 600.0 | 19.49 | 19.50 |
| 800.0 | 21.06 | 27.17 | 6.38 | 20.22 | 0.99 | 1.00 | 34.68 | 0.70 | 800.0 | 19.44 | 19.44 |
| 1000.0 | 19.67 | 26.31 | 6.01 | 20.36 | 1.01 | 1.04 | 34.79 | 0.72 | 1000.0 | 19.39 | 19.40 |
| 1200.0 | 18.45 | 25.37 | 5.82 | 20.61 | 1.02 | 1.06 | 35.45 | 0.80 | 1200.0 | 19.42 | 19.42 |
| 1400.0 | 17.38 | 24.50 | 5.74 | 21.03 | 1.03 | 1.07 | 35.61 | 0.86 | 1400.0 | 19.58 | 19.58 |
| 1600.0 | 16.42 | 23.68 | 5.75 | 21.50 | 1.05 | 1.08 | 35.80 | 0.93 | 1600.0 | 19.58 | 19.58 |
| 1700.0 | 15.99 | 23.31 | 5.77 | 21.75 | 1.05 | 1.08 | 35.73 | 0.92 | 1700.0 | 19.68 | 19.67 |
| 1900.0 | 15.19 | 22.56 | 5.86 | 22.34 | 1.06 | 1.08 | 36.45 | 0.88 | 1900.0 | 19.85 | 19.85 |
| 2100.0 | 14.47 | 21.84 | 6.05 | 22.73 | 1.07 | 1.07 | 36.07 | 0.92 | 2100.0 | 19.81 | 20.14 |
| 2300.0 | 13.85 | 21.09 | 6.21 | 23.02 | 1.07 | 1.06 | 36.62 | 1.05 | 2300.0 | 19.81 | 20.13 |
| 2500.0 | 13.28 | 20.39 | 6.44 | 23.02 | 1.07 | 1.05 | 36.65 | 1.08 | 2600.0 | 19.98 | 20.24 |
| 2700.0 | 12.77 | 19.76 | 6.69 | 22.84 | 1.07 | 1.03 | 36.68 | 1.21 | 2800.0 | 19.90 | 20.38 |
| 2900.0 | 12.28 | 19.12 | 7.02 | 22.45 | 1.07 | 1.01 | 36.37 | 1.07 | 2900.0 | 19.94 | 20.36 |
| 3000.0 | 12.00 | 18.94 | 7.09 | 22.73 | 1.09 | 1.01 | 36.77 | 1.19 | 4100.0 | 20.00 | 20.01 |
| 3200.0 | 11.66 | 18.29 | 7.19 | 22.59 | 1.07 | 0.99 | 36.38 | 1.23 | 4300.0 | 20.17 | 20.17 |
| 3400.0 | 11.29 | 17.75 | 7.30 | 22.67 | 1.06 | 0.98 | 36.60 | 1.26 | 4500.0 | 19.94 | 19.95 |
| 3600.0 | 10.96 | 17.32 | 7.35 | 23.30 | 1.06 | 0.97 | 36.61 | 1.31 | 4700.0 | 20.23 | 20.24 |
| 3800.0 | 10.65 | 16.94 | 7.27 | 24.32 | 1.06 | 0.97 | 36.94 | 1.51 | 5000.0 | 19.95 | 19.96 |
| 4000.0 | 10.37 | 16.61 | 7.10 | 25.42 | 1.06 | 0.96 | 36.56 | 1.49 | 5200.0 | 19.85 | 19.86 |
| 4100.0 | 10.22 | 16.51 | 7.05 | 26.00 | 1.06 | 0.96 | 36.64 | 1.50 | 5300.0 | 19.94 | 19.95 |
| 4300.0 | 9.48 | 16.36 | 7.95 | 24.42 | 1.16 | 0.95 | 36.77 | 1.85 | 5400.0 | 19.90 | 19.92 |
| 4500.0 | 9.03 | 16.34 | 6.02 | 21.37 | 1.11 | 1.03 | 36.77 | 1.95 | 5600.0 | 19.53 | 19.52 |
| 4700.0 | 8.88 | 16.14 | 5.40 | 19.21 | 1.08 | 1.04 | 37.56 | 1.80 | 5800.0 | 19.73 | 19.73 |
| 4900.0 | 8.50 | 16.01 | 4.98 | 17.03 | 1.08 | 1.05 | 38.00 | 1.77 | 6000.0 | 19.59 | 19.59 |
| 5100.0 | 8.08 | 15.88 | 4.63 | 15.41 | 1.08 | 1.06 | 37.55 | 1.91 | 6200.0 | 19.43 | 19.44 |
| 5300.0 | 7.64 | 15.75 | 4.27 | 13.94 | 1.08 | 1.07 | 36.79 | 1.92 | 6500.0 | 19.18 | 19.19 |
| 5400.0 | 7.43 | 15.68 | 4.10 | 13.21 | 1.08 | 1.07 | 37.13 | 2.05 | 6700.0 | 18.84 | 18.81 |
| 5600.0 | 6.98 | 15.60 | 3.81 | 12.16 | 1.08 | 1.08 | 36.37 | 2.11 | 6900.0 | 18.65 | 18.65 |
| 5800.0 | 6.57 | 15.48 | 3.54 | 11.23 | 1.08 | 1.08 | 35.79 | 2.42 | 7000.0 | 18.94 | 18.97 |
| 6000.0 | 6.14 | 15.36 | 3.30 | 10.40 | 1.08 | 1.07 | 35.19 | 2.45 | | | |
| 6200.0 | 5.73 | 15.26 | 3.09 | 9.74 | 1.07 | 1.07 | 35.25 | 2.60 | | | |
| 6400.0 | 5.32 | 15.16 | 2.93 | 9.12 | 1.07 | 1.06 | 34.91 | 2.85 | | | |
| 6600.0 | 4.94 | 15.08 | 2.77 | 8.61 | 1.07 | 1.06 | 35.76 | 2.86 | | | |
| 6800.0 | 4.55 | 14.99 | 2.62 | 8.13 | 1.07 | 1.05 | 36.09 | 3.29 | | | |
| 7000.0 | 4.17 | 14.93 | 2.49 | 7.65 | 1.07 | 1.04 | 35.59 | 3.30 | | | |

(1) Current is externally limited during P1dB measurements. Unit is capable of higher output power if current is not limited.



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 = 3V, Rbias=681 ohms, Id=67 mA @ Temperature = -45degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | Noise Figure |
|--------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|--------------|
| | | | | | K | Measure | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dB) |
| 50.0 | 24.80 | 33.31 | 12.29 | 10.27 | 1.38 | 0.77 | 33.64 | 1.44 |
| 100.0 | 25.62 | 30.84 | 14.33 | 13.98 | 1.11 | 0.70 | 33.27 | 0.78 |
| 200.0 | 25.53 | 30.08 | 12.90 | 17.53 | 1.05 | 0.72 | 34.24 | 0.52 |
| 300.0 | 25.01 | 29.72 | 10.91 | 18.66 | 1.04 | 0.76 | 34.50 | 0.49 |
| 500.0 | 23.58 | 28.78 | 8.41 | 19.06 | 1.02 | 0.85 | 34.51 | 0.50 |
| 600.0 | 22.83 | 28.35 | 7.68 | 19.24 | 1.02 | 0.89 | 35.27 | 0.51 |
| 800.0 | 21.36 | 27.39 | 6.80 | 19.32 | 1.03 | 0.95 | 35.66 | 0.53 |
| 1000.0 | 20.02 | 26.41 | 6.33 | 19.41 | 1.03 | 0.99 | 35.79 | 0.54 |
| 1200.0 | 18.82 | 25.44 | 6.07 | 19.83 | 1.04 | 1.01 | 36.23 | 0.64 |
| 1400.0 | 17.76 | 24.56 | 5.94 | 20.18 | 1.05 | 1.02 | 36.55 | 0.67 |
| 1600.0 | 16.81 | 23.64 | 5.93 | 20.88 | 1.05 | 1.03 | 36.76 | 0.71 |
| 1700.0 | 16.38 | 23.27 | 5.93 | 21.24 | 1.05 | 1.03 | 36.54 | 0.68 |
| 1900.0 | 15.60 | 22.45 | 6.00 | 22.00 | 1.05 | 1.03 | 37.05 | 0.64 |
| 2100.0 | 14.89 | 21.67 | 6.22 | 22.99 | 1.06 | 1.02 | 37.06 | 0.72 |
| 2300.0 | 14.27 | 20.93 | 6.35 | 23.89 | 1.05 | 1.01 | 37.05 | 0.76 |
| 2500.0 | 13.70 | 20.25 | 6.58 | 24.63 | 1.05 | 1.00 | 37.11 | 0.83 |
| 2700.0 | 13.20 | 19.55 | 6.89 | 24.96 | 1.05 | 0.98 | 37.15 | 0.91 |
| 2900.0 | 12.73 | 18.93 | 7.24 | 24.48 | 1.05 | 0.96 | 37.49 | 0.79 |
| 3000.0 | 12.40 | 18.74 | 7.45 | 24.59 | 1.07 | 0.96 | 37.48 | 0.90 |
| 3200.0 | 12.11 | 18.06 | 7.39 | 24.69 | 1.04 | 0.94 | 37.23 | 1.00 |
| 3400.0 | 11.75 | 17.55 | 7.58 | 24.05 | 1.04 | 0.93 | 37.27 | 1.03 |
| 3600.0 | 11.41 | 17.10 | 7.59 | 25.32 | 1.04 | 0.92 | 37.08 | 1.24 |
| 3800.0 | 11.13 | 16.68 | 7.49 | 26.11 | 1.03 | 0.91 | 36.93 | 1.00 |
| 4000.0 | 10.84 | 16.37 | 7.28 | 26.01 | 1.03 | 0.91 | 36.79 | 1.06 |
| 4100.0 | 10.69 | 16.27 | 7.17 | 25.74 | 1.03 | 0.91 | 36.43 | 1.06 |
| 4300.0 | 10.16 | 16.03 | 7.84 | 23.44 | 1.09 | 0.89 | 36.85 | 1.29 |
| 4500.0 | 9.42 | 16.11 | 6.12 | 19.38 | 1.08 | 0.98 | 36.42 | 1.36 |
| 4700.0 | 9.33 | 15.93 | 5.44 | 17.50 | 1.05 | 0.98 | 37.57 | 1.33 |
| 4900.0 | 8.96 | 15.75 | 4.99 | 15.40 | 1.05 | 0.98 | 37.53 | 1.31 |
| 5100.0 | 8.52 | 15.64 | 4.60 | 13.98 | 1.05 | 1.00 | 37.09 | 1.43 |
| 5300.0 | 8.09 | 15.52 | 4.26 | 12.81 | 1.05 | 1.00 | 36.11 | 1.42 |
| 5400.0 | 7.88 | 15.45 | 4.07 | 12.10 | 1.04 | 1.00 | 36.47 | 1.57 |
| 5600.0 | 7.44 | 15.34 | 3.78 | 11.22 | 1.04 | 1.01 | 35.63 | 1.76 |
| 5800.0 | 7.00 | 15.23 | 3.48 | 10.37 | 1.04 | 1.01 | 35.05 | 1.73 |
| 6000.0 | 6.59 | 15.12 | 3.25 | 9.64 | 1.04 | 1.00 | 34.54 | 1.97 |
| 6200.0 | 6.19 | 14.98 | 3.07 | 9.16 | 1.04 | 1.00 | 34.74 | 2.08 |
| 6400.0 | 5.78 | 14.91 | 2.86 | 8.49 | 1.03 | 0.99 | 34.42 | 2.08 |
| 6600.0 | 5.42 | 14.80 | 2.71 | 8.07 | 1.03 | 0.99 | 35.23 | 2.32 |
| 6800.0 | 5.05 | 14.71 | 2.56 | 7.66 | 1.03 | 0.98 | 35.34 | 2.31 |
| 7000.0 | 4.68 | 14.63 | 2.41 | 7.17 | 1.03 | 0.96 | 34.68 | 2.52 |

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 = 3V, Rbias=681 ohms, Id=57 mA @ Temperature = +85degC

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | Noise Figure |
|--------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|--------------|
| | | | | | K | Measure | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dB) |
| 50.0 | 23.90 | 33.47 | 10.57 | 9.44 | 1.47 | 0.79 | 31.37 | 2.45 |
| 100.0 | 25.17 | 31.04 | 10.45 | 12.70 | 1.13 | 0.74 | 30.56 | 1.26 |
| 200.0 | 25.27 | 30.03 | 9.62 | 16.08 | 1.02 | 0.77 | 31.48 | 0.82 |
| 300.0 | 24.70 | 29.47 | 8.55 | 17.37 | 0.98 | 0.83 | 31.92 | 0.79 |
| 500.0 | 23.13 | 28.37 | 7.01 | 18.64 | 0.94 | 0.94 | 32.09 | 0.77 |
| 600.0 | 22.32 | 27.84 | 6.58 | 19.01 | 0.94 | 0.98 | 32.94 | 0.79 |
| 800.0 | 20.76 | 26.91 | 6.03 | 19.27 | 0.95 | 1.04 | 33.91 | 0.84 |
| 1000.0 | 19.35 | 26.10 | 5.73 | 19.73 | 0.98 | 1.08 | 34.04 | 0.87 |
| 1200.0 | 18.12 | 25.27 | 5.60 | 20.01 | 1.00 | 1.10 | 34.71 | 0.96 |
| 1400.0 | 17.04 | 24.46 | 5.55 | 20.44 | 1.02 | 1.11 | 34.83 | 1.03 |
| 1600.0 | 16.09 | 23.64 | 5.59 | 20.81 | 1.03 | 1.12 | 35.00 | 1.11 |
| 1700.0 | 15.65 | 23.33 | 5.62 | 20.95 | 1.05 | 1.12 | 34.88 | 1.13 |
| 1900.0 | 14.85 | 22.54 | 5.71 | 21.26 | 1.06 | 1.11 | 35.71 | 1.11 |
| 2100.0 | 14.13 | 21.85 | 5.91 | 21.33 | 1.07 | 1.11 | 35.71 | 1.15 |
| 2300.0 | 13.50 | 21.17 | 6.09 | 21.33 | 1.08 | 1.09 | 35.83 | 1.23 |
| 2500.0 | 12.93 | 20.49 | 6.31 | 21.10 | 1.08 | 1.08 | 35.90 | 1.33 |
| 2700.0 | 12.40 | 19.88 | 6.51 | 20.99 | 1.09 | 1.07 | 35.93 | 1.47 |
| 2900.0 | 11.91 | 19.26 | 6.82 | 20.74 | 1.09 | 1.05 | 35.70 | 1.53 |
| 3000.0 | 11.64 | 19.03 | 6.90 | 20.81 | 1.10 | 1.04 | 36.01 | 1.46 |
| 3200.0 | 11.28 | 18.47 | 6.95 | 20.98 | 1.09 | 1.03 | 35.76 | 1.49 |
| 3400.0 | 10.91 | 17.94 | 7.02 | 21.46 | 1.08 | 1.02 | 35.95 | 1.56 |
| 3600.0 | 10.56 | 17.49 | 7.09 | 21.91 | 1.08 | 1.01 | 36.21 | 1.62 |
| 3800.0 | 10.26 | 17.13 | 7.02 | 22.80 | 1.08 | 1.01 | 36.93 | 1.61 |
| 4000.0 | 9.96 | 16.84 | 6.87 | 24.32 | 1.08 | 1.01 | 36.58 | 1.85 |
| 4100.0 | 9.80 | 16.73 | 6.80 | 25.40 | 1.09 | 1.01 | 36.74 | 1.85 |
| 4300.0 | 9.08 | 16.57 | 7.62 | 24.97 | 1.19 | 0.99 | 37.10 | 2.21 |
| 4500.0 | 8.62 | 16.58 | 6.02 | 23.00 | 1.15 | 1.07 | 37.26 | 2.22 |
| 4700.0 | 8.47 | 16.39 | 5.37 | 20.59 | 1.12 | 1.08 | 37.66 | 2.16 |
| 4900.0 | 8.12 | 16.23 | 4.97 | 18.53 | 1.11 | 1.10 | 37.98 | 2.31 |
| 5100.0 | 7.73 | 16.06 | 4.63 | 16.68 | 1.11 | 1.11 | 38.11 | 2.37 |
| 5300.0 | 7.29 | 15.94 | 4.29 | 15.04 | 1.11 | 1.12 | 37.42 | 2.35 |
| 5400.0 | 7.08 | 15.88 | 4.11 | 14.25 | 1.11 | 1.12 | 37.91 | 2.54 |
| 5600.0 | 6.65 | 15.78 | 3.81 | 13.05 | 1.11 | 1.13 | 37.13 | 2.67 |
| 5800.0 | 6.23 | 15.64 | 3.58 | 11.99 | 1.11 | 1.12 | 36.72 | 2.81 |
| 6000.0 | 5.80 | 15.54 | 3.34 | 11.09 | 1.11 | 1.12 | 36.02 | 3.01 |
| 6200.0 | 5.36 | 15.45 | 3.11 | 10.27 | 1.10 | 1.12 | 36.11 | 3.30 |
| 6400.0 | 4.95 | 15.36 | 2.96 | 9.70 | 1.11 | 1.12 | 35.79 | 3.40 |
| 6600.0 | 4.56 | 15.28 | 2.80 | 9.09 | 1.11 | 1.11 | 36.42 | 3.60 |
| 6800.0 | 4.14 | 15.23 | 2.65 | 8.53 | 1.11 | 1.10 | 37.07 | 4.05 |
| 7000.0 | 3.74 | 15.19 | 2.54 | 8.04 | 1.11 | 1.09 | 36.56 | 4.02 |