

MMIC Amplifier Die

TSS-13HLN-D+

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 = 2.75V, Id = 63mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 1 | 23.66 | 28.72 | 9.42 | 10.79 | 1.09 | 0.61 | 30.06 | 13.37 | - |
| 3 | 24.02 | 28.16 | 11.85 | 20.07 | 1.08 | 0.64 | 30.31 | 13.38 | - |
| 5 | 23.99 | 28.01 | 12.29 | 24.75 | 1.07 | 0.64 | 30.45 | 13.45 | - |
| 7 | 23.91 | 27.68 | 12.56 | 26.54 | 1.06 | 0.62 | 30.61 | 13.55 | - |
| 9 | 23.82 | 27.54 | 12.90 | 26.56 | 1.05 | 0.62 | 30.77 | 13.79 | - |
| 10 | 23.77 | 27.33 | 13.05 | 26.19 | 1.04 | 0.61 | 30.84 | 13.84 | 0.93 |
| 20 | 23.24 | 26.25 | 14.73 | 22.19 | 1.02 | 0.55 | 31.69 | 15.26 | 1.06 |
| 30 | 22.86 | 25.61 | 16.32 | 20.72 | 1.02 | 0.50 | 32.37 | 16.45 | 0.96 |
| 40 | 22.65 | 25.36 | 17.46 | 20.24 | 1.02 | 0.48 | 32.69 | 17.44 | 0.99 |
| 50 | 22.54 | 25.53 | 18.04 | 19.35 | 1.04 | 0.47 | 32.84 | 17.98 | 1.03 |
| 60 | 22.44 | 25.17 | 18.77 | 19.77 | 1.03 | 0.47 | 32.95 | 17.98 | 1.02 |
| 70 | 22.38 | 25.03 | 19.11 | 19.69 | 1.03 | 0.46 | 33.03 | 18.11 | 1.05 |
| 80 | 22.34 | 25.05 | 19.40 | 19.65 | 1.03 | 0.46 | 33.12 | 18.27 | 1.05 |
| 90 | 22.31 | 25.06 | 19.55 | 19.69 | 1.04 | 0.47 | 33.15 | 18.30 | 1.06 |
| 100 | 22.29 | 24.98 | 19.75 | 19.79 | 1.04 | 0.46 | 33.18 | 18.39 | 1.10 |
| 150 | 22.22 | 24.98 | 20.03 | 20.30 | 1.04 | 0.47 | 32.84 | 18.43 | 1.11 |
| 200 | 22.16 | 24.99 | 19.88 | 21.17 | 1.04 | 0.48 | 33.19 | 18.46 | 1.12 |
| 250 | 22.12 | 25.12 | 19.47 | 22.31 | 1.05 | 0.50 | 32.66 | 18.57 | 1.09 |
| 300 | 22.06 | 25.18 | 18.91 | 23.51 | 1.05 | 0.52 | 33.62 | 18.58 | 1.10 |
| 350 | 21.99 | 25.25 | 18.21 | 24.30 | 1.05 | 0.55 | 32.69 | 18.62 | 1.16 |
| 400 | 21.91 | 25.30 | 17.56 | 24.21 | 1.05 | 0.57 | 31.99 | 18.51 | 1.14 |
| 450 | 21.81 | 25.47 | 16.88 | 22.76 | 1.06 | 0.60 | 31.94 | 18.34 | 1.12 |
| 500 | 21.67 | 25.61 | 16.13 | 20.60 | 1.07 | 0.63 | 31.30 | 18.54 | 1.13 |
| 550 | 21.41 | 25.88 | 15.14 | 18.40 | 1.08 | 0.68 | 30.83 | 18.10 | 1.13 |
| 600 | 21.11 | 26.18 | 13.50 | 18.72 | 1.10 | 0.74 | 30.29 | 18.10 | 1.15 |
| 650 | 21.24 | 26.08 | 13.46 | 18.13 | 1.09 | 0.73 | 30.35 | 18.12 | 1.14 |
| 700 | 21.13 | 26.09 | 13.22 | 16.20 | 1.08 | 0.73 | 30.21 | 18.14 | 1.16 |
| 750 | 20.94 | 26.31 | 12.83 | 14.74 | 1.09 | 0.76 | 29.97 | 17.95 | 1.14 |
| 800 | 20.72 | 26.47 | 12.31 | 13.52 | 1.10 | 0.78 | 29.70 | 18.02 | 1.25 |
| 850 | 20.46 | 26.64 | 11.75 | 12.47 | 1.11 | 0.80 | 29.13 | 18.00 | 1.24 |
| 900 | 20.13 | 26.98 | 11.09 | 11.50 | 1.13 | 0.83 | 29.00 | 17.83 | 1.22 |
| 950 | 19.71 | 27.39 | 10.30 | 10.58 | 1.15 | 0.87 | 27.92 | 17.52 | 1.25 |
| 1000 | 19.10 | 27.90 | 9.28 | 9.77 | 1.20 | 0.92 | 27.69 | 17.12 | 1.29 |
| 1050 | 18.20 | 28.75 | 7.93 | 9.41 | 1.29 | 1.00 | 27.17 | 16.56 | 1.38 |
| 1100 | 17.69 | 29.16 | 6.76 | 10.67 | 1.35 | 1.11 | 26.71 | 16.33 | 1.43 |
| 1150 | 18.04 | 28.75 | 6.44 | 12.23 | 1.28 | 1.13 | 27.53 | 16.84 | 1.45 |
| 1200 | 17.99 | 28.76 | 6.18 | 11.58 | 1.25 | 1.14 | 27.39 | 17.02 | 1.60 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package



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 = 3.00V, Id = 72mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | | | (dBm) | (dBm) | (dB) |
| 1 | 23.86 | 28.94 | 9.63 | 10.92 | 1.10 | 0.62 | 31.64 | 14.60 | 2.92 |
| 3 | 24.22 | 28.04 | 12.16 | 20.79 | 1.07 | 0.61 | 31.90 | 14.60 | 1.94 |
| 5 | 24.19 | 28.07 | 12.62 | 26.07 | 1.07 | 0.63 | 32.05 | 14.66 | 1.69 |
| 7 | 24.10 | 27.81 | 12.89 | 28.17 | 1.06 | 0.62 | 32.21 | 14.76 | 1.51 |
| 9 | 24.00 | 27.56 | 13.23 | 27.70 | 1.05 | 0.61 | 32.37 | 15.00 | 1.21 |
| 10 | 23.96 | 27.42 | 13.37 | 26.88 | 1.04 | 0.60 | 32.44 | 15.05 | 0.95 |
| 20 | 23.41 | 26.28 | 14.96 | 21.60 | 1.01 | 0.53 | 33.27 | 16.34 | 1.05 |
| 30 | 23.03 | 25.73 | 16.44 | 20.06 | 1.02 | 0.49 | 33.87 | 17.73 | 0.98 |
| 40 | 22.82 | 25.45 | 17.31 | 19.43 | 1.02 | 0.47 | 34.20 | 18.49 | 1.00 |
| 50 | 22.70 | 25.42 | 18.11 | 18.91 | 1.01 | 0.46 | 34.35 | 19.10 | 1.01 |
| 60 | 22.60 | 25.22 | 18.50 | 18.98 | 1.03 | 0.45 | 34.46 | 19.00 | 1.02 |
| 70 | 22.54 | 25.23 | 18.81 | 18.85 | 1.03 | 0.46 | 34.51 | 19.10 | 1.04 |
| 80 | 22.51 | 25.16 | 18.97 | 18.79 | 1.03 | 0.45 | 34.59 | 19.18 | 1.04 |
| 90 | 22.47 | 25.17 | 19.18 | 18.86 | 1.04 | 0.46 | 34.64 | 19.29 | 1.03 |
| 100 | 22.45 | 25.14 | 19.32 | 18.92 | 1.04 | 0.45 | 34.66 | 19.38 | 1.07 |
| 150 | 22.38 | 25.10 | 19.63 | 19.39 | 1.04 | 0.46 | 34.76 | 19.41 | 1.10 |
| 200 | 22.33 | 25.16 | 19.63 | 20.12 | 1.04 | 0.48 | 34.06 | 19.36 | 1.09 |
| 250 | 22.29 | 25.15 | 19.48 | 21.21 | 1.04 | 0.48 | 34.42 | 19.56 | 1.09 |
| 300 | 22.24 | 25.26 | 19.18 | 22.39 | 1.05 | 0.51 | 34.22 | 19.58 | 1.08 |
| 350 | 22.17 | 25.36 | 18.70 | 23.36 | 1.05 | 0.53 | 33.99 | 19.53 | 1.16 |
| 400 | 22.10 | 25.46 | 18.22 | 23.91 | 1.06 | 0.56 | 33.32 | 19.51 | 1.15 |
| 450 | 22.01 | 25.58 | 17.63 | 23.04 | 1.06 | 0.59 | 33.40 | 19.36 | 1.12 |
| 500 | 21.88 | 25.72 | 17.00 | 21.17 | 1.07 | 0.62 | 32.98 | 19.47 | 1.13 |
| 550 | 21.63 | 25.99 | 16.06 | 18.95 | 1.08 | 0.66 | 32.18 | 19.03 | 1.13 |
| 600 | 21.34 | 26.20 | 14.25 | 19.17 | 1.10 | 0.72 | 32.14 | 19.15 | 1.14 |
| 650 | 21.47 | 26.10 | 14.23 | 18.88 | 1.08 | 0.70 | 32.15 | 19.06 | 1.15 |
| 700 | 21.38 | 26.22 | 14.03 | 16.91 | 1.09 | 0.72 | 31.72 | 19.10 | 1.21 |
| 750 | 21.21 | 26.37 | 13.64 | 15.35 | 1.09 | 0.74 | 31.38 | 18.91 | 1.16 |
| 800 | 21.00 | 26.52 | 13.12 | 14.07 | 1.10 | 0.76 | 31.30 | 19.11 | 1.20 |
| 850 | 20.75 | 26.78 | 12.53 | 12.95 | 1.11 | 0.79 | 30.62 | 19.12 | 1.18 |
| 900 | 20.44 | 27.00 | 11.85 | 11.92 | 1.13 | 0.81 | 30.31 | 18.96 | 1.22 |
| 950 | 20.03 | 27.40 | 11.01 | 10.95 | 1.15 | 0.85 | 29.53 | 18.70 | 1.23 |
| 1000 | 19.43 | 27.92 | 9.91 | 10.08 | 1.20 | 0.90 | 29.28 | 18.30 | 1.27 |
| 1050 | 18.55 | 28.80 | 8.44 | 9.65 | 1.30 | 0.99 | 28.66 | 17.78 | 1.33 |
| 1100 | 18.02 | 29.27 | 7.16 | 10.88 | 1.37 | 1.09 | 28.14 | 17.52 | 1.42 |
| 1150 | 18.39 | 28.81 | 6.81 | 12.60 | 1.29 | 1.11 | 28.94 | 17.99 | 1.46 |
| 1200 | 18.37 | 28.82 | 6.54 | 12.01 | 1.26 | 1.12 | 28.80 | 18.11 | 1.51 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package

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 = 3.25V, Id = 79mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | | | (dBm) | (dBm) | (dB) |
| 1 | 24.05 | 28.98 | 9.84 | 11.01 | 1.09 | 0.60 | 33.24 | 15.59 | - |
| 3 | 24.41 | 28.36 | 12.51 | 21.27 | 1.07 | 0.62 | 33.51 | 15.65 | - |
| 5 | 24.37 | 28.19 | 12.94 | 27.57 | 1.07 | 0.62 | 33.65 | 15.65 | - |
| 7 | 24.28 | 27.82 | 13.22 | 29.97 | 1.05 | 0.60 | 33.84 | 15.75 | - |
| 9 | 24.18 | 27.46 | 13.53 | 28.49 | 1.04 | 0.58 | 34.00 | 15.96 | - |
| 10 | 24.14 | 27.51 | 13.69 | 27.27 | 1.04 | 0.59 | 34.03 | 16.01 | 0.96 |
| 20 | 23.53 | 26.42 | 15.06 | 21.16 | 1.01 | 0.53 | 34.83 | 17.25 | 1.06 |
| 30 | 23.14 | 25.86 | 16.41 | 19.58 | 1.02 | 0.49 | 35.50 | 18.44 | 0.97 |
| 40 | 22.92 | 25.55 | 17.22 | 18.94 | 1.02 | 0.47 | 35.70 | 19.27 | 0.99 |
| 50 | 22.81 | 25.52 | 17.60 | 18.41 | 1.01 | 0.45 | 35.88 | 19.76 | 1.05 |
| 60 | 22.71 | 25.37 | 18.24 | 18.48 | 1.03 | 0.46 | 35.96 | 19.75 | 1.01 |
| 70 | 22.65 | 25.31 | 18.51 | 18.37 | 1.03 | 0.45 | 35.98 | 19.75 | 1.05 |
| 80 | 22.61 | 25.24 | 18.69 | 18.32 | 1.03 | 0.45 | 36.08 | 19.84 | 1.07 |
| 90 | 22.58 | 25.22 | 18.81 | 18.34 | 1.03 | 0.45 | 36.13 | 19.94 | 1.05 |
| 100 | 22.55 | 25.28 | 18.99 | 18.39 | 1.04 | 0.46 | 36.15 | 20.02 | 1.08 |
| 150 | 22.49 | 25.21 | 19.27 | 18.83 | 1.04 | 0.46 | 36.02 | 20.05 | 1.13 |
| 200 | 22.44 | 25.29 | 19.43 | 19.51 | 1.04 | 0.47 | 35.36 | 20.00 | 1.11 |
| 250 | 22.40 | 25.27 | 19.41 | 20.54 | 1.04 | 0.48 | 36.51 | 20.21 | 1.10 |
| 300 | 22.35 | 25.32 | 19.24 | 21.65 | 1.05 | 0.50 | 34.56 | 20.23 | 1.10 |
| 350 | 22.29 | 25.43 | 18.91 | 22.70 | 1.05 | 0.53 | 34.93 | 20.18 | 1.16 |
| 400 | 22.23 | 25.51 | 18.59 | 23.52 | 1.05 | 0.55 | 34.58 | 20.16 | 1.11 |
| 450 | 22.13 | 25.67 | 18.15 | 23.10 | 1.06 | 0.58 | 34.31 | 20.02 | 1.11 |
| 500 | 22.01 | 25.78 | 17.58 | 21.50 | 1.07 | 0.61 | 33.99 | 20.15 | 1.13 |
| 550 | 21.77 | 25.98 | 16.68 | 19.29 | 1.08 | 0.65 | 32.98 | 19.70 | 1.15 |
| 600 | 21.49 | 26.28 | 14.77 | 19.46 | 1.10 | 0.71 | 32.79 | 19.82 | 1.14 |
| 650 | 21.63 | 26.18 | 14.77 | 19.38 | 1.08 | 0.69 | 33.13 | 19.73 | 1.14 |
| 700 | 21.54 | 26.22 | 14.60 | 17.37 | 1.08 | 0.70 | 32.52 | 19.77 | 1.21 |
| 750 | 21.38 | 26.41 | 14.22 | 15.79 | 1.09 | 0.72 | 32.42 | 19.58 | 1.19 |
| 800 | 21.18 | 26.56 | 13.69 | 14.45 | 1.10 | 0.75 | 32.37 | 19.69 | 1.17 |
| 850 | 20.93 | 26.76 | 13.10 | 13.28 | 1.11 | 0.77 | 31.79 | 19.82 | 1.21 |
| 900 | 20.63 | 27.04 | 12.38 | 12.21 | 1.13 | 0.80 | 31.40 | 19.67 | 1.24 |
| 950 | 20.23 | 27.40 | 11.50 | 11.19 | 1.15 | 0.84 | 30.59 | 19.43 | 1.27 |
| 1000 | 19.64 | 27.98 | 10.35 | 10.28 | 1.20 | 0.89 | 30.32 | 19.04 | 1.28 |
| 1050 | 18.76 | 28.80 | 8.79 | 9.82 | 1.30 | 0.97 | 29.73 | 18.53 | 1.37 |
| 1100 | 18.24 | 29.28 | 7.43 | 11.07 | 1.37 | 1.08 | 29.17 | 18.29 | 1.42 |
| 1150 | 18.62 | 28.88 | 7.07 | 12.86 | 1.30 | 1.10 | 29.99 | 18.63 | 1.47 |
| 1200 | 18.61 | 28.80 | 6.79 | 12.28 | 1.25 | 1.11 | 29.86 | 18.87 | 1.53 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package

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 = 4.75V, Id = 132mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | | | (dBm) | (dBm) | (dB) |
| 1 | 24.63 | 29.24 | 10.42 | 11.20 | 1.08 | 0.58 | 38.06 | 19.95 | - |
| 3 | 24.96 | 28.67 | 13.59 | 22.35 | 1.07 | 0.59 | 38.37 | 19.99 | - |
| 5 | 24.93 | 28.64 | 14.09 | 32.48 | 1.07 | 0.61 | 38.54 | 20.12 | - |
| 7 | 24.83 | 28.21 | 14.30 | 33.65 | 1.05 | 0.58 | 38.73 | 20.20 | - |
| 9 | 24.72 | 27.91 | 14.56 | 28.26 | 1.04 | 0.56 | 38.93 | 20.30 | - |
| 10 | 24.67 | 27.82 | 14.64 | 26.29 | 1.03 | 0.56 | 39.01 | 20.46 | 1.01 |
| 20 | 24.07 | 26.70 | 15.49 | 19.44 | 1.01 | 0.49 | 39.94 | 21.88 | 1.09 |
| 30 | 23.66 | 26.30 | 16.11 | 17.81 | 1.01 | 0.47 | 40.63 | 22.73 | 1.02 |
| 40 | 23.43 | 25.94 | 16.50 | 17.22 | 1.02 | 0.44 | 40.83 | 23.08 | 1.03 |
| 50 | 23.31 | 25.90 | 16.53 | 16.64 | 1.01 | 0.43 | 41.07 | 23.53 | 1.05 |
| 60 | 23.20 | 25.69 | 16.92 | 16.69 | 1.02 | 0.42 | 41.11 | 23.43 | 1.03 |
| 70 | 23.14 | 25.71 | 17.01 | 16.59 | 1.03 | 0.43 | 41.19 | 23.50 | 1.05 |
| 80 | 23.10 | 25.62 | 17.06 | 16.54 | 1.03 | 0.42 | 41.22 | 23.58 | 1.04 |
| 90 | 23.07 | 25.67 | 17.15 | 16.55 | 1.03 | 0.43 | 41.29 | 23.59 | 1.06 |
| 100 | 23.04 | 25.66 | 17.23 | 16.59 | 1.03 | 0.43 | 41.30 | 23.68 | 1.09 |
| 150 | 22.98 | 25.62 | 17.58 | 16.89 | 1.04 | 0.43 | 40.13 | 23.71 | 1.08 |
| 200 | 22.94 | 25.62 | 17.92 | 17.50 | 1.04 | 0.44 | 39.70 | 23.74 | 1.11 |
| 250 | 22.92 | 25.66 | 18.37 | 18.34 | 1.04 | 0.45 | 37.81 | 23.92 | 1.11 |
| 300 | 22.89 | 25.71 | 18.76 | 19.45 | 1.04 | 0.47 | 38.89 | 23.94 | 1.07 |
| 350 | 22.85 | 25.80 | 19.15 | 20.67 | 1.05 | 0.49 | 39.46 | 24.01 | 1.15 |
| 400 | 22.81 | 25.87 | 19.63 | 22.41 | 1.05 | 0.51 | 39.70 | 23.91 | 1.12 |
| 450 | 22.75 | 25.97 | 20.05 | 24.05 | 1.06 | 0.53 | 38.31 | 23.83 | 1.12 |
| 500 | 22.66 | 26.04 | 20.40 | 24.67 | 1.06 | 0.55 | 38.55 | 24.06 | 1.12 |
| 550 | 22.46 | 26.29 | 20.24 | 22.84 | 1.08 | 0.60 | 38.09 | 23.54 | 1.14 |
| 600 | 22.20 | 26.59 | 17.82 | 22.66 | 1.10 | 0.66 | 38.26 | 23.69 | 1.15 |
| 650 | 22.37 | 26.43 | 17.83 | 24.73 | 1.09 | 0.63 | 37.26 | 23.49 | 1.14 |
| 700 | 22.32 | 26.50 | 18.02 | 21.85 | 1.09 | 0.64 | 36.83 | 23.56 | 1.21 |
| 750 | 22.20 | 26.62 | 17.79 | 19.38 | 1.10 | 0.66 | 36.62 | 23.35 | 1.18 |
| 800 | 22.05 | 26.83 | 17.30 | 17.41 | 1.11 | 0.68 | 37.09 | 23.51 | 1.19 |
| 850 | 21.85 | 26.99 | 16.62 | 15.76 | 1.12 | 0.71 | 36.48 | 23.56 | 1.19 |
| 900 | 21.59 | 27.32 | 15.74 | 14.27 | 1.14 | 0.74 | 36.38 | 23.46 | 1.24 |
| 950 | 21.23 | 27.69 | 14.58 | 12.92 | 1.17 | 0.78 | 35.92 | 23.39 | 1.25 |
| 1000 | 20.67 | 28.23 | 12.99 | 11.73 | 1.23 | 0.83 | 35.86 | 23.01 | 1.27 |
| 1050 | 19.79 | 29.12 | 10.89 | 11.12 | 1.35 | 0.92 | 35.35 | 22.68 | 1.35 |
| 1100 | 19.26 | 29.68 | 9.10 | 12.65 | 1.45 | 1.02 | 34.36 | 22.45 | 1.38 |
| 1150 | 19.69 | 29.26 | 8.57 | 15.23 | 1.36 | 1.04 | 34.72 | 22.58 | 1.45 |
| 1200 | 19.76 | 29.23 | 8.25 | 14.40 | 1.32 | 1.04 | 34.91 | 22.81 | 1.50 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package

MMIC Amplifier Die

TSS-13HLN-D+

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 = 5.00V, Id = 141mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 1 | 24.69 | 29.23 | 10.49 | 11.20 | 1.08 | 0.57 | 38.64 | 20.51 | 3.20 |
| 3 | 25.03 | 28.87 | 13.71 | 22.38 | 1.08 | 0.61 | 38.87 | 20.60 | 1.99 |
| 5 | 24.99 | 28.43 | 14.23 | 32.65 | 1.06 | 0.58 | 39.06 | 20.60 | 1.84 |
| 7 | 24.89 | 28.13 | 14.44 | 33.52 | 1.04 | 0.56 | 39.25 | 20.69 | 1.75 |
| 9 | 24.78 | 27.98 | 14.69 | 28.06 | 1.04 | 0.56 | 39.47 | 20.90 | 1.61 |
| 10 | 24.73 | 27.80 | 14.76 | 26.23 | 1.03 | 0.55 | 39.57 | 20.95 | 1.04 |
| 20 | 24.12 | 26.82 | 15.41 | 19.33 | 1.01 | 0.50 | 40.52 | 22.44 | 1.10 |
| 30 | 23.71 | 26.32 | 16.13 | 17.70 | 1.01 | 0.47 | 41.25 | 23.15 | 1.04 |
| 40 | 23.48 | 26.00 | 16.42 | 17.12 | 1.02 | 0.44 | 41.61 | 23.49 | 1.04 |
| 50 | 23.36 | 25.91 | 16.50 | 16.56 | 1.03 | 0.45 | 41.70 | 23.95 | 1.02 |
| 60 | 23.25 | 25.79 | 16.75 | 16.58 | 1.03 | 0.43 | 41.72 | 23.85 | 1.02 |
| 70 | 23.19 | 25.70 | 16.86 | 16.47 | 1.03 | 0.42 | 41.85 | 23.91 | 1.03 |
| 80 | 23.15 | 25.77 | 16.92 | 16.43 | 1.03 | 0.43 | 41.87 | 23.99 | 1.05 |
| 90 | 23.12 | 25.66 | 16.95 | 16.43 | 1.03 | 0.42 | 41.87 | 24.08 | 1.07 |
| 100 | 23.09 | 25.66 | 17.07 | 16.48 | 1.03 | 0.42 | 41.92 | 24.09 | 1.11 |
| 150 | 23.03 | 25.65 | 17.40 | 16.80 | 1.04 | 0.43 | 39.26 | 24.20 | 1.08 |
| 200 | 22.99 | 25.67 | 17.74 | 17.38 | 1.04 | 0.44 | 39.17 | 24.15 | 1.11 |
| 250 | 22.97 | 25.67 | 18.20 | 18.23 | 1.04 | 0.44 | 38.24 | 24.42 | 1.10 |
| 300 | 22.94 | 25.77 | 18.64 | 19.29 | 1.05 | 0.47 | 40.19 | 24.45 | 1.11 |
| 350 | 22.91 | 25.72 | 19.09 | 20.61 | 1.04 | 0.47 | 40.60 | 24.44 | 1.15 |
| 400 | 22.87 | 25.88 | 19.64 | 22.37 | 1.05 | 0.50 | 38.60 | 24.42 | 1.14 |
| 450 | 22.81 | 25.94 | 20.16 | 24.30 | 1.06 | 0.52 | 39.17 | 24.26 | 1.15 |
| 500 | 22.73 | 26.07 | 20.63 | 25.37 | 1.06 | 0.55 | 39.58 | 24.50 | 1.15 |
| 550 | 22.53 | 26.29 | 20.59 | 23.64 | 1.08 | 0.59 | 38.63 | 23.98 | 1.16 |
| 600 | 22.27 | 26.57 | 18.14 | 23.35 | 1.10 | 0.65 | 37.58 | 24.13 | 1.17 |
| 650 | 22.44 | 26.46 | 18.17 | 26.05 | 1.09 | 0.62 | 37.70 | 24.03 | 1.13 |
| 700 | 22.40 | 26.50 | 18.39 | 22.74 | 1.09 | 0.63 | 37.46 | 24.00 | 1.21 |
| 750 | 22.29 | 26.63 | 18.23 | 20.02 | 1.10 | 0.65 | 37.40 | 23.80 | 1.18 |
| 800 | 22.14 | 26.85 | 17.72 | 17.87 | 1.11 | 0.68 | 37.61 | 23.95 | 1.19 |
| 850 | 21.94 | 27.03 | 17.06 | 16.12 | 1.12 | 0.70 | 37.26 | 24.11 | 1.18 |
| 900 | 21.69 | 27.32 | 16.15 | 14.56 | 1.14 | 0.73 | 37.11 | 24.02 | 1.20 |
| 950 | 21.33 | 27.74 | 14.96 | 13.15 | 1.18 | 0.78 | 36.17 | 23.83 | 1.21 |
| 1000 | 20.77 | 28.28 | 13.30 | 11.91 | 1.24 | 0.83 | 36.17 | 23.45 | 1.26 |
| 1050 | 19.88 | 29.20 | 11.13 | 11.32 | 1.36 | 0.92 | 35.69 | 23.12 | 1.36 |
| 1100 | 19.35 | 29.81 | 9.29 | 12.93 | 1.47 | 1.02 | 35.25 | 22.88 | 1.40 |
| 1150 | 19.78 | 29.33 | 8.75 | 15.67 | 1.37 | 1.03 | 35.36 | 23.02 | 1.45 |
| 1200 | 19.87 | 29.26 | 8.41 | 14.70 | 1.33 | 1.03 | 35.65 | 23.36 | 1.53 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package



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 = 5.25V, Id = 149mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | | | (dBm) | (dBm) | (dB) |
| 1 | 24.74 | 29.13 | 10.55 | 11.18 | 1.07 | 0.55 | 39.03 | 20.85 | - |
| 3 | 25.08 | 28.64 | 13.86 | 22.39 | 1.06 | 0.58 | 39.23 | 21.01 | - |
| 5 | 25.04 | 28.47 | 14.38 | 32.74 | 1.06 | 0.58 | 39.38 | 21.05 | - |
| 7 | 24.95 | 28.27 | 14.58 | 33.36 | 1.05 | 0.57 | 39.59 | 21.13 | - |
| 9 | 24.83 | 28.03 | 14.79 | 27.91 | 1.04 | 0.56 | 39.80 | 21.22 | - |
| 10 | 24.78 | 27.82 | 14.88 | 26.10 | 1.03 | 0.55 | 39.90 | 21.26 | 1.09 |
| 20 | 24.17 | 26.74 | 15.46 | 19.35 | 1.00 | 0.48 | 40.85 | 23.02 | 1.12 |
| 30 | 23.75 | 26.33 | 16.05 | 17.60 | 1.01 | 0.46 | 41.60 | 23.59 | 1.06 |
| 40 | 23.52 | 26.01 | 16.40 | 17.02 | 1.02 | 0.43 | 41.95 | 23.92 | 1.04 |
| 50 | 23.40 | 25.92 | 16.53 | 16.52 | 1.04 | 0.43 | 42.07 | 24.39 | 1.05 |
| 60 | 23.29 | 25.81 | 16.64 | 16.50 | 1.02 | 0.42 | 42.21 | 24.28 | 1.04 |
| 70 | 23.23 | 25.77 | 16.73 | 16.41 | 1.03 | 0.42 | 42.21 | 24.35 | 1.04 |
| 80 | 23.19 | 25.73 | 16.84 | 16.36 | 1.03 | 0.42 | 42.27 | 24.42 | 1.07 |
| 90 | 23.16 | 25.76 | 16.86 | 16.36 | 1.03 | 0.42 | 42.27 | 24.52 | 1.08 |
| 100 | 23.13 | 25.66 | 16.93 | 16.40 | 1.03 | 0.41 | 42.35 | 24.53 | 1.10 |
| 150 | 23.07 | 25.68 | 17.27 | 16.71 | 1.04 | 0.42 | 39.95 | 24.64 | 1.13 |
| 200 | 23.04 | 25.72 | 17.62 | 17.29 | 1.04 | 0.44 | 42.28 | 24.59 | 1.11 |
| 250 | 23.02 | 25.77 | 18.03 | 18.13 | 1.04 | 0.45 | 41.80 | 24.86 | 1.10 |
| 300 | 22.99 | 25.78 | 18.54 | 19.19 | 1.04 | 0.46 | 39.45 | 24.89 | 1.11 |
| 350 | 22.96 | 25.79 | 19.06 | 20.52 | 1.05 | 0.47 | 38.75 | 24.89 | 1.18 |
| 400 | 22.92 | 25.94 | 19.63 | 22.37 | 1.05 | 0.50 | 37.54 | 24.88 | 1.15 |
| 450 | 22.87 | 25.93 | 20.22 | 24.52 | 1.05 | 0.51 | 38.28 | 24.72 | 1.12 |
| 500 | 22.79 | 26.10 | 20.82 | 26.05 | 1.06 | 0.54 | 39.27 | 24.97 | 1.18 |
| 550 | 22.59 | 26.30 | 20.93 | 24.43 | 1.08 | 0.58 | 38.27 | 24.44 | 1.20 |
| 600 | 22.33 | 26.62 | 18.43 | 24.16 | 1.10 | 0.64 | 38.40 | 24.60 | 1.20 |
| 650 | 22.51 | 26.50 | 18.47 | 27.54 | 1.09 | 0.62 | 38.20 | 24.50 | 1.16 |
| 700 | 22.47 | 26.58 | 18.77 | 23.59 | 1.09 | 0.63 | 37.29 | 24.48 | 1.17 |
| 750 | 22.36 | 26.70 | 18.63 | 20.56 | 1.10 | 0.65 | 37.17 | 24.28 | 1.22 |
| 800 | 22.21 | 26.85 | 18.15 | 18.24 | 1.11 | 0.67 | 38.02 | 24.43 | 1.22 |
| 850 | 22.02 | 27.10 | 17.46 | 16.40 | 1.13 | 0.70 | 37.24 | 24.59 | 1.24 |
| 900 | 21.77 | 27.36 | 16.53 | 14.77 | 1.15 | 0.73 | 37.26 | 24.39 | 1.22 |
| 950 | 21.41 | 27.75 | 15.28 | 13.30 | 1.18 | 0.77 | 36.96 | 24.29 | 1.23 |
| 1000 | 20.84 | 28.40 | 13.57 | 12.06 | 1.25 | 0.83 | 36.12 | 23.92 | 1.32 |
| 1050 | 19.94 | 29.29 | 11.31 | 11.48 | 1.38 | 0.92 | 36.11 | 23.58 | 1.35 |
| 1100 | 19.43 | 29.84 | 9.43 | 13.27 | 1.48 | 1.01 | 36.14 | 23.36 | 1.43 |
| 1150 | 19.88 | 29.35 | 8.91 | 16.12 | 1.38 | 1.03 | 36.02 | 23.51 | 1.45 |
| 1200 | 19.97 | 29.32 | 8.57 | 14.87 | 1.34 | 1.02 | 36.11 | 23.74 | 1.57 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package

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 = 7.60V, Id = 224mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 1 | 25.00 | 29.26 | 10.98 | 11.05 | 1.07 | 0.53 | 41.68 | 24.85 | - |
| 3 | 25.35 | 28.69 | 14.73 | 22.10 | 1.06 | 0.55 | 41.61 | 24.98 | - |
| 5 | 25.30 | 28.50 | 15.31 | 30.86 | 1.05 | 0.54 | 41.49 | 24.96 | - |
| 7 | 25.20 | 28.26 | 15.46 | 31.17 | 1.04 | 0.54 | 41.67 | 25.13 | - |
| 9 | 25.08 | 28.25 | 15.63 | 27.13 | 1.04 | 0.55 | 41.74 | 25.19 | - |
| 10 | 25.01 | 27.87 | 15.45 | 24.94 | 1.02 | 0.52 | 41.83 | 25.21 | 1.31 |
| 20 | 24.36 | 26.83 | 15.77 | 19.25 | 1.00 | 0.47 | 42.49 | 26.38 | 1.31 |
| 30 | 23.93 | 26.39 | 15.86 | 17.68 | 1.01 | 0.44 | 43.15 | 26.32 | 1.23 |
| 40 | 23.69 | 26.24 | 16.00 | 17.02 | 1.02 | 0.44 | 43.56 | 26.59 | 1.21 |
| 50 | 23.56 | 26.02 | 15.90 | 16.71 | 1.02 | 0.43 | 43.78 | 28.24 | 1.20 |
| 60 | 23.45 | 25.97 | 16.03 | 16.58 | 1.03 | 0.42 | 44.09 | 27.10 | 1.16 |
| 70 | 23.39 | 25.96 | 16.03 | 16.45 | 1.03 | 0.43 | 44.33 | 27.34 | 1.18 |
| 80 | 23.35 | 25.91 | 16.05 | 16.40 | 1.03 | 0.42 | 44.19 | 27.07 | 1.17 |
| 90 | 23.31 | 25.89 | 16.09 | 16.41 | 1.03 | 0.42 | 44.45 | 27.47 | 1.21 |
| 100 | 23.29 | 25.91 | 16.13 | 16.45 | 1.03 | 0.43 | 44.34 | 27.55 | 1.25 |
| 150 | 23.23 | 25.83 | 16.44 | 16.76 | 1.04 | 0.42 | 42.96 | 27.62 | 1.25 |
| 200 | 23.20 | 25.87 | 16.75 | 17.32 | 1.04 | 0.43 | 40.94 | 27.64 | 1.22 |
| 250 | 23.18 | 25.86 | 17.16 | 18.17 | 1.04 | 0.44 | 42.92 | 27.80 | 1.22 |
| 300 | 23.16 | 25.86 | 17.70 | 19.25 | 1.04 | 0.45 | 42.17 | 27.85 | 1.23 |
| 350 | 23.13 | 26.00 | 18.24 | 20.64 | 1.05 | 0.47 | 38.01 | 27.95 | 1.27 |
| 400 | 23.11 | 26.02 | 18.87 | 22.67 | 1.05 | 0.48 | 38.63 | 27.91 | 1.25 |
| 450 | 23.06 | 26.17 | 19.59 | 25.70 | 1.06 | 0.51 | 40.84 | 27.87 | 1.28 |
| 500 | 22.99 | 26.19 | 20.43 | 31.10 | 1.06 | 0.53 | 42.35 | 28.01 | 1.29 |
| 550 | 22.81 | 26.44 | 20.99 | 39.90 | 1.08 | 0.57 | 43.34 | 27.64 | 1.27 |
| 600 | 22.53 | 26.76 | 18.83 | 34.06 | 1.11 | 0.63 | 42.43 | 27.73 | 1.28 |
| 650 | 22.72 | 26.64 | 18.71 | 32.14 | 1.09 | 0.61 | 41.30 | 27.71 | 1.27 |
| 700 | 22.70 | 26.72 | 19.08 | 25.28 | 1.10 | 0.61 | 44.15 | 27.81 | 1.35 |
| 750 | 22.61 | 26.85 | 19.07 | 21.57 | 1.10 | 0.63 | 41.78 | 27.65 | 1.33 |
| 800 | 22.47 | 27.04 | 18.66 | 18.92 | 1.12 | 0.66 | 43.57 | 27.65 | 1.39 |
| 850 | 22.28 | 27.29 | 17.97 | 16.88 | 1.13 | 0.68 | 41.35 | 27.63 | 1.36 |
| 900 | 22.03 | 27.58 | 16.97 | 15.15 | 1.16 | 0.72 | 41.94 | 27.54 | 1.38 |
| 950 | 21.67 | 27.99 | 15.66 | 13.66 | 1.20 | 0.76 | 41.90 | 26.84 | 1.43 |
| 1000 | 21.09 | 28.68 | 13.90 | 12.52 | 1.28 | 0.82 | 41.64 | 26.63 | 1.43 |
| 1050 | 20.18 | 29.59 | 11.64 | 12.26 | 1.43 | 0.91 | 40.06 | 26.19 | 1.51 |
| 1100 | 19.53 | 30.42 | 9.70 | 14.74 | 1.60 | 1.02 | 40.85 | 25.90 | 1.61 |
| 1150 | 19.95 | 30.04 | 9.02 | 18.04 | 1.49 | 1.03 | 41.00 | 26.70 | 1.62 |
| 1200 | 20.11 | 29.90 | 8.63 | 15.07 | 1.42 | 1.02 | 41.68 | 26.83 | 1.73 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package

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 = 8.00V, Id = 236mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dB) |
| 1 | 25.00 | 29.23 | 11.03 | 11.06 | 1.07 | 0.53 | 41.17 | 25.22 | 2.87 |
| 3 | 25.35 | 28.74 | 14.88 | 22.04 | 1.06 | 0.55 | 40.94 | 25.32 | 1.84 |
| 5 | 25.31 | 28.45 | 15.47 | 30.39 | 1.05 | 0.54 | 40.81 | 25.28 | 1.49 |
| 7 | 25.20 | 28.15 | 15.60 | 30.86 | 1.04 | 0.52 | 41.00 | 25.35 | 1.52 |
| 9 | 25.08 | 28.09 | 15.74 | 27.06 | 1.03 | 0.53 | 41.05 | 25.55 | 1.35 |
| 10 | 25.01 | 27.84 | 15.62 | 24.51 | 1.02 | 0.52 | 41.15 | 25.59 | 1.40 |
| 20 | 24.36 | 26.81 | 15.80 | 19.35 | 1.00 | 0.46 | 41.83 | 26.80 | 1.39 |
| 30 | 23.93 | 26.44 | 15.89 | 17.70 | 1.01 | 0.45 | 42.68 | 26.68 | 1.28 |
| 40 | 23.69 | 26.24 | 15.95 | 17.06 | 1.02 | 0.44 | 42.89 | 26.96 | 1.26 |
| 50 | 23.56 | 25.96 | 15.96 | 16.69 | 1.02 | 0.43 | 43.33 | 28.68 | 1.25 |
| 60 | 23.45 | 25.98 | 15.95 | 16.60 | 1.03 | 0.42 | 43.53 | 27.46 | 1.26 |
| 70 | 23.39 | 25.95 | 15.94 | 16.52 | 1.03 | 0.42 | 43.50 | 27.74 | 1.28 |
| 80 | 23.35 | 25.83 | 15.97 | 16.46 | 1.03 | 0.41 | 43.49 | 27.41 | 1.26 |
| 90 | 23.32 | 25.87 | 16.04 | 16.47 | 1.03 | 0.42 | 43.56 | 27.87 | 1.29 |
| 100 | 23.29 | 25.89 | 16.05 | 16.50 | 1.03 | 0.42 | 43.80 | 28.31 | 1.30 |
| 150 | 23.23 | 25.84 | 16.34 | 16.82 | 1.04 | 0.42 | 40.24 | 28.02 | 1.30 |
| 200 | 23.20 | 25.88 | 16.63 | 17.37 | 1.04 | 0.44 | 43.04 | 28.04 | 1.29 |
| 250 | 23.18 | 25.92 | 17.07 | 18.23 | 1.04 | 0.45 | 39.88 | 28.18 | 1.29 |
| 300 | 23.16 | 25.92 | 17.57 | 19.30 | 1.04 | 0.45 | 44.87 | 28.25 | 1.29 |
| 350 | 23.14 | 26.01 | 18.10 | 20.66 | 1.05 | 0.47 | 39.66 | 28.34 | 1.34 |
| 400 | 23.11 | 26.01 | 18.74 | 22.72 | 1.05 | 0.48 | 40.58 | 28.31 | 1.35 |
| 450 | 23.07 | 26.18 | 19.43 | 25.77 | 1.06 | 0.51 | 43.22 | 28.28 | 1.34 |
| 500 | 22.99 | 26.26 | 20.27 | 31.15 | 1.07 | 0.53 | 42.35 | 28.46 | 1.35 |
| 550 | 22.81 | 26.49 | 20.85 | 43.22 | 1.08 | 0.58 | 43.47 | 28.04 | 1.36 |
| 600 | 22.53 | 26.78 | 18.75 | 34.76 | 1.11 | 0.64 | 43.37 | 28.11 | 1.39 |
| 650 | 22.73 | 26.69 | 18.59 | 30.67 | 1.10 | 0.61 | 40.36 | 28.11 | 1.37 |
| 700 | 22.71 | 26.72 | 18.98 | 24.77 | 1.10 | 0.61 | 42.77 | 28.20 | 1.38 |
| 750 | 22.61 | 26.87 | 18.95 | 21.24 | 1.10 | 0.63 | 42.38 | 28.05 | 1.39 |
| 800 | 22.47 | 27.11 | 18.54 | 18.74 | 1.12 | 0.66 | 41.25 | 28.03 | 1.44 |
| 850 | 22.29 | 27.31 | 17.87 | 16.71 | 1.13 | 0.68 | 40.81 | 27.90 | 1.39 |
| 900 | 22.03 | 27.62 | 16.90 | 15.03 | 1.16 | 0.72 | 43.27 | 27.81 | 1.48 |
| 950 | 21.67 | 28.10 | 15.58 | 13.56 | 1.21 | 0.76 | 40.24 | 27.06 | 1.47 |
| 1000 | 21.09 | 28.66 | 13.83 | 12.45 | 1.28 | 0.82 | 41.25 | 26.95 | 1.53 |
| 1050 | 20.16 | 29.70 | 11.58 | 12.24 | 1.44 | 0.92 | 39.94 | 26.39 | 1.58 |
| 1100 | 19.51 | 30.45 | 9.66 | 14.86 | 1.61 | 1.02 | 39.98 | 26.20 | 1.69 |
| 1150 | 19.94 | 30.04 | 8.98 | 18.10 | 1.50 | 1.03 | 42.31 | 27.05 | 1.74 |
| 1200 | 20.10 | 30.00 | 8.60 | 14.93 | 1.43 | 1.02 | 40.48 | 27.17 | 1.79 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package



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 = 8.40V, Id = 246mA @ Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output | 1dB Comp. Output | Noise Figure |
|-------|-------|-----------|-------------------|--------------------|-----------|---------|-------------|------------------|--------------|
| | | | | | K | Measure | | | |
| (MHz) | (dB) | (dB) | (dB) | (dB) | | | (dBm) | (dBm) | (dB) |
| 1 | 24.98 | 29.11 | 11.15 | 11.03 | 1.07 | 0.51 | 40.46 | 25.58 | - |
| 3 | 25.33 | 28.89 | 15.08 | 21.93 | 1.07 | 0.57 | 40.21 | 25.69 | - |
| 5 | 25.29 | 28.63 | 15.62 | 29.84 | 1.06 | 0.56 | 40.09 | 25.76 | - |
| 7 | 25.18 | 28.35 | 15.77 | 30.44 | 1.05 | 0.55 | 40.33 | 25.84 | - |
| 9 | 25.06 | 28.05 | 15.85 | 27.09 | 1.03 | 0.53 | 40.39 | 25.93 | - |
| 10 | 25.00 | 27.83 | 15.97 | 25.11 | 1.03 | 0.51 | 40.44 | 25.95 | 1.47 |
| 20 | 24.35 | 26.98 | 15.86 | 19.35 | 1.01 | 0.48 | 41.20 | 27.22 | 1.46 |
| 30 | 23.91 | 26.45 | 15.87 | 17.86 | 1.01 | 0.45 | 41.80 | 27.02 | 1.36 |
| 40 | 23.68 | 26.18 | 15.90 | 17.26 | 1.02 | 0.44 | 42.31 | 27.31 | 1.30 |
| 50 | 23.54 | 26.14 | 16.02 | 16.77 | 1.03 | 0.43 | 42.48 | 29.07 | 1.31 |
| 60 | 23.44 | 25.98 | 15.86 | 16.75 | 1.03 | 0.43 | 42.71 | 27.79 | 1.31 |
| 70 | 23.37 | 25.90 | 15.84 | 16.65 | 1.03 | 0.42 | 42.87 | 28.15 | 1.33 |
| 80 | 23.33 | 25.94 | 15.89 | 16.59 | 1.03 | 0.43 | 42.97 | 27.72 | 1.32 |
| 90 | 23.30 | 25.85 | 15.92 | 16.60 | 1.03 | 0.42 | 43.08 | 28.25 | 1.35 |
| 100 | 23.28 | 25.91 | 15.96 | 16.65 | 1.03 | 0.43 | 43.09 | 28.68 | 1.36 |
| 150 | 23.22 | 25.81 | 16.24 | 16.97 | 1.04 | 0.42 | 41.45 | 28.42 | 1.37 |
| 200 | 23.18 | 25.88 | 16.52 | 17.53 | 1.04 | 0.44 | 42.87 | 28.40 | 1.39 |
| 250 | 23.17 | 25.86 | 16.93 | 18.40 | 1.04 | 0.44 | 41.98 | 28.53 | 1.35 |
| 300 | 23.15 | 25.96 | 17.44 | 19.46 | 1.05 | 0.46 | 43.39 | 28.60 | 1.34 |
| 350 | 23.12 | 25.96 | 17.98 | 20.85 | 1.05 | 0.47 | 39.79 | 28.68 | 1.40 |
| 400 | 23.09 | 26.06 | 18.59 | 22.87 | 1.05 | 0.49 | 38.23 | 28.71 | 1.39 |
| 450 | 23.05 | 26.14 | 19.26 | 25.94 | 1.06 | 0.51 | 41.81 | 28.69 | 1.38 |
| 500 | 22.98 | 26.29 | 20.05 | 31.28 | 1.07 | 0.54 | 43.49 | 28.79 | 1.40 |
| 550 | 22.79 | 26.43 | 20.60 | 49.39 | 1.08 | 0.58 | 42.17 | 28.44 | 1.43 |
| 600 | 22.52 | 26.85 | 18.56 | 36.16 | 1.12 | 0.64 | 40.68 | 28.43 | 1.43 |
| 650 | 22.71 | 26.67 | 18.39 | 28.96 | 1.10 | 0.61 | 40.12 | 28.51 | 1.37 |
| 700 | 22.69 | 26.76 | 18.77 | 23.93 | 1.10 | 0.62 | 41.79 | 28.54 | 1.47 |
| 750 | 22.59 | 26.88 | 18.74 | 20.76 | 1.11 | 0.63 | 42.44 | 28.39 | 1.45 |
| 800 | 22.45 | 27.13 | 18.32 | 18.39 | 1.12 | 0.66 | 43.57 | 28.34 | 1.47 |
| 850 | 22.26 | 27.36 | 17.66 | 16.46 | 1.14 | 0.69 | 40.93 | 28.18 | 1.49 |
| 900 | 22.01 | 27.69 | 16.67 | 14.83 | 1.17 | 0.72 | 41.10 | 28.10 | 1.51 |
| 950 | 21.64 | 28.08 | 15.39 | 13.40 | 1.20 | 0.76 | 40.10 | 27.30 | 1.57 |
| 1000 | 21.05 | 28.74 | 13.66 | 12.34 | 1.29 | 0.82 | 40.73 | 27.11 | 1.59 |
| 1050 | 20.12 | 29.78 | 11.46 | 12.20 | 1.46 | 0.92 | 41.34 | 26.54 | 1.66 |
| 1100 | 19.46 | 30.46 | 9.57 | 14.90 | 1.61 | 1.02 | 40.06 | 26.34 | 1.73 |
| 1150 | 19.90 | 30.13 | 8.90 | 17.99 | 1.51 | 1.04 | 40.17 | 27.34 | 1.84 |
| 1200 | 20.05 | 30.04 | 8.52 | 14.69 | 1.44 | 1.02 | 41.09 | 27.43 | 1.82 |

Note: Test data of Die packaged in industry standard 3x3 mm, 12-lead MCL package