## *Typical Performance Data*

| VDS (V) | IDS (mA) @ VGS= | | | | | | |
|---|---|---|---|---|---|---|---|
| | -1.00V | -0.90V | -0.8V | -0.7V | -0.6V | -0.4V | -0.2V |
| 0.0 | -0.01 | -0.01 | 0.03 | 0.04 | -0.01 | -0.12 | -0.14 |
| 0.1 | 1.32 | 3.19 | 8.04 | 14.00 | 19.61 | 28.89 | 34.79 |
| 0.2 | 1.67 | 4.87 | 12.63 | 23.34 | 34.52 | 54.04 | 67.14 |
| 0.3 | 1.85 | 5.85 | 15.15 | 28.87 | 44.46 | 74.08 | 95.60 |
| 0.4 | 1.98 | 6.53 | 16.73 | 32.10 | 50.52 | 88.67 | 120.14 |
| 0.5 | 2.11 | 7.05 | 17.86 | 34.12 | 54.08 | 98.28 | 138.30 |
| 0.6 | 2.22 | 7.46 | 18.72 | 35.53 | 56.26 | 104.20 | 150.94 |
| 0.7 | 2.32 | 7.79 | 19.41 | 36.62 | 57.79 | 107.32 | 158.60 |
| 0.8 | 2.43 | 8.09 | 20.01 | 37.56 | 59.04 | 109.22 | 162.68 |
| 0.9 | 2.52 | 8.37 | 20.56 | 38.39 | 60.11 | 110.60 | 164.94 |
| 1.0 | 2.62 | 8.63 | 21.08 | 39.15 | 61.07 | 111.72 | 166.36 |
| 1.1 | 2.71 | 8.88 | 21.56 | 39.86 | 61.95 | 112.68 | 167.34 |
| 1.2 | 2.80 | 9.12 | 22.02 | 40.53 | 62.78 | 113.52 | 168.08 |
| 1.3 | 2.89 | 9.36 | 22.45 | 41.16 | 63.55 | 114.24 | 168.62 |
| 1.4 | 2.98 | 9.59 | 22.87 | 41.77 | 64.27 | 114.88 | 169.04 |
| 1.5 | 3.06 | 9.82 | 23.30 | 42.35 | 64.97 | 115.48 | 169.34 |
| 1.6 | 3.15 | 10.07 | 23.75 | 42.95 | 65.64 | 116.02 | 169.62 |
| 1.7 | 3.25 | 10.36 | 24.27 | 43.58 | 66.30 | 116.52 | 169.84 |
| 1.8 | 3.37 | 10.73 | 24.89 | 44.31 | 66.96 | 117.02 | 170.00 |
| 1.9 | 3.52 | 11.20 | 25.67 | 45.16 | 67.66 | 117.48 | 170.18 |
| 2.0 | 3.69 | 11.79 | 26.61 | 46.04 | 68.36 | 117.92 | 170.30 |
| 2.1 | 3.88 | 12.50 | 27.60 | 46.97 | 69.08 | 118.32 | 170.26 |
| 2.2 | 4.10 | 13.07 | 28.39 | 47.86 | 69.78 | 118.72 | 170.18 |
| 2.3 | 4.29 | 13.50 | 29.01 | 48.62 | 70.41 | 119.12 | 170.18 |
| 2.4 | 4.45 | 13.85 | 29.51 | 49.24 | 71.02 | 119.50 | 170.26 |
| 2.5 | 4.58 | 14.15 | 29.93 | 49.77 | 71.57 | 119.84 | 170.46 |
| 2.6 | 4.70 | 14.40 | 30.28 | 50.22 | 72.06 | 120.24 | 170.70 |
| 2.7 | 4.81 | 14.63 | 30.62 | 50.62 | 72.51 | 120.56 | 171.12 |
| 2.8 | 4.90 | 14.82 | 30.90 | 50.98 | 72.92 | 120.90 | 171.26 |
| 2.9 | 4.98 | 15.01 | 31.17 | 51.30 | 73.30 | 121.20 | 171.42 |
| 3.0 | 5.07 | 15.19 | 31.42 | 51.61 | 73.65 | 121.50 | 171.60 |
| 3.1 | 5.15 | 15.35 | 31.65 | 51.88 | 73.98 | 121.82 | 171.80 |
| 3.2 | 5.22 | 15.50 | 31.86 | 52.16 | 74.28 | 122.16 | 171.98 |
| 3.3 | 5.30 | 15.65 | 32.08 | 52.41 | 74.57 | 122.46 | 172.14 |
| 3.4 | 5.37 | 15.80 | 32.27 | 52.65 | 74.85 | 122.84 | 172.28 |
| 3.5 | 5.44 | 15.93 | 32.47 | 52.88 | 75.12 | 123.20 | -- |
| 3.6 | 5.51 | 16.06 | 32.65 | 53.11 | 75.39 | 123.58 | -- |
| 3.7 | 5.57 | 16.19 | 32.83 | 53.33 | 75.65 | 123.96 | -- |
| 3.8 | 5.64 | 16.32 | 33.00 | 53.53 | 75.90 | 124.32 | -- |
| 3.9 | 5.70 | 16.44 | 33.17 | 53.74 | 76.17 | 124.68 | -- |
| 4.0 | 5.77 | 16.56 | 33.34 | 53.95 | 76.42 | 125.04 | -- |
| 4.1 | 5.83 | 16.68 | 33.50 | 54.16 | 76.69 | 125.36 | -- |
| 4.2 | 5.90 | 16.80 | 33.68 | 54.36 | 76.96 | 125.68 | -- |
| 4.3 | 5.97 | 16.92 | 33.84 | 54.56 | 77.23 | 125.96 | -- |
| 4.4 | 6.03 | 17.04 | 34.00 | 54.77 | 77.52 | 126.28 | -- |
| 4.5 | 6.10 | 17.16 | 34.17 | 54.98 | 77.80 | 126.54 | -- |
| 4.6 | 6.16 | 17.28 | 34.33 | 55.19 | 78.10 | 126.74 | -- |
| 4.7 | 6.23 | 17.39 | 34.50 | 55.41 | 78.41 | 127.00 | -- |
| 4.8 | 6.30 | 17.51 | 34.67 | 55.63 | 78.71 | -- | -- |
| 4.9 | 6.37 | 17.64 | 34.84 | 55.86 | 79.03 | -- | -- |
| 5.00 | 6.44 | 17.76 | 35.01 | 56.09 | 79.35 | -- | -- |

## Typical Performance Data

| FREQ (GHz) | GAIN vs FREQ & TEMPERATURE[1] @ VDS=4V, IDS=60mA | | | NOISE FIGURE vs FREQ & TEMPERATURE [1] @ VDS=4V, IDS=60mA | | |
|---|---|---|---|---|---|---|
| | -45°C | +25°C | +85°C | -45°C | +25°C | +85°C |
| 0.01 | 25.03 | 24.80 | 24.25 | 3.77 | 2.19 | 4.50 |
| 0.05 | 25.00 | 24.77 | 24.23 | 0.83 | 0.55 | 1.03 |
| 0.10 | 24.94 | 24.72 | 24.18 | 0.50 | 0.40 | 0.62 |
| 0.20 | 24.78 | 24.57 | 24.03 | 0.51 | 0.45 | 0.60 |
| 0.30 | 24.55 | 24.33 | 23.80 | 0.56 | 0.48 | 0.62 |
| 0.40 | 24.26 | 24.01 | 23.49 | 0.43 | 0.36 | 0.48 |
| 0.50 | 23.91 | 23.65 | 23.14 | 0.49 | 0.43 | 0.55 |
| 0.60 | 23.51 | 23.24 | 22.75 | 0.52 | 0.41 | 0.57 |
| 0.70 | 23.08 | 22.80 | 22.33 | 0.41 | 0.39 | 0.49 |
| 0.80 | 22.65 | 22.35 | 21.89 | 0.57 | 0.51 | 0.62 |
| 0.90 | 22.20 | 21.88 | 21.44 | 0.52 | 0.40 | 0.56 |
| 1.00 | 21.74 | 21.42 | 20.98 | 0.47 | 0.39 | 0.49 |
| 1.10 | 21.30 | 20.97 | 20.54 | 0.56 | 0.45 | 0.60 |
| 1.20 | 20.85 | 20.52 | 20.10 | 0.58 | 0.49 | 0.62 |
| 1.30 | 20.41 | 20.08 | 19.66 | 0.57 | 0.48 | 0.64 |
| 1.40 | 19.98 | 19.64 | 19.24 | 0.63 | 0.52 | 0.70 |
| 1.50 | 19.56 | 19.22 | 18.83 | 0.66 | 0.52 | 0.73 |
| 1.60 | 19.16 | 18.82 | 18.44 | 0.57 | 0.57 | 0.64 |
| 1.70 | 18.78 | 18.44 | 18.05 | 0.52 | 0.42 | 0.64 |
| 1.80 | 18.39 | 18.05 | 17.67 | 0.60 | 0.42 | 0.66 |
| 1.90 | 18.04 | 17.70 | 17.31 | 0.55 | 0.45 | 0.65 |
| 2.00 | 17.70 | 17.35 | 16.97 | 0.57 | 0.44 | 0.70 |
| 2.10 | 17.37 | 17.02 | 16.63 | 0.61 | 0.49 | 0.70 |
| 2.20 | 17.05 | 16.69 | 16.31 | 0.59 | 0.48 | 0.72 |
| 2.30 | 16.74 | 16.38 | 16.00 | 0.63 | 0.44 | 0.79 |
| 2.40 | 16.44 | 16.08 | 15.70 | 0.59 | 0.37 | 0.68 |
| 2.50 | 16.16 | 15.79 | 15.42 | 0.73 | 0.53 | 0.96 |
| 2.60 | 15.87 | 15.50 | 15.13 | 0.73 | 0.52 | 0.83 |
| 2.70 | 15.61 | 15.24 | 14.86 | 0.80 | 0.64 | 0.92 |
| 2.80 | 15.36 | 14.98 | 14.60 | 0.96 | 0.72 | 1.00 |
| 2.90 | 15.12 | 14.73 | 14.35 | 0.85 | 0.59 | 0.97 |
| 3.00 | 14.88 | 14.49 | 14.11 | 0.87 | 0.65 | 0.96 |
| 3.10 | 14.64 | 14.25 | 13.87 | 0.74 | 0.51 | 0.89 |
| 3.20 | 14.40 | 14.01 | 13.64 | 0.70 | 0.56 | 0.95 |
| 3.30 | 14.18 | 13.79 | 13.41 | 0.78 | 0.59 | 0.95 |
| 3.40 | 13.95 | 13.56 | 13.18 | 0.78 | 0.58 | 0.95 |
| 3.50 | 13.74 | 13.35 | 12.97 | 0.74 | 0.57 | 0.94 |
| 3.60 | 13.53 | 13.14 | 12.76 | 0.76 | 0.69 | 1.01 |
| 3.70 | 13.31 | 12.92 | 12.55 | 0.85 | 0.73 | 0.97 |
| 3.80 | 13.10 | 12.71 | 12.35 | 0.87 | 0.67 | 1.00 |
| 3.90 | 12.90 | 12.52 | 12.16 | 0.85 | 0.67 | 1.04 |
| 4.00 | 12.70 | 12.33 | 11.97 | 0.90 | 0.72 | 1.11 |

[1] Includes test board loss

[2] Drain current was allowed to increase during compression measurement

## Typical Performance Data

| FREQ (GHz) | OIP3 vs FREQ & TEMPERATURE [1] @ VDS=4V, IDS=60mA | | | P1dB vs FREQ & TEMPERATURE[1,2] @ VDS=4V, IDS=60mA | | |
|---|---|---|---|---|---|---|
| | -45°C | +25°C | +85°C | -45°C | +25°C | +85°C |
| 0.01 | 34.01 | 33.94 | 29.65 | 19.24 | 18.86 | 19.20 |
| 0.05 | 32.57 | 31.95 | 30.18 | 19.85 | 19.19 | 19.76 |
| 0.10 | 33.21 | 33.19 | 31.56 | 19.83 | 19.20 | 19.58 |
| 0.20 | 33.39 | 32.89 | 31.65 | 19.82 | 19.37 | 19.57 |
| 0.30 | 33.44 | 32.79 | 31.61 | 20.30 | 19.64 | 20.21 |
| 0.40 | 33.57 | 33.25 | 31.14 | 19.95 | 19.36 | 19.86 |
| 0.50 | 33.74 | 33.29 | 31.61 | 19.88 | 19.46 | 19.79 |
| 0.60 | 33.85 | 33.67 | 31.67 | 20.15 | 19.75 | 20.05 |
| 0.70 | 34.03 | 33.46 | 32.18 | 20.20 | 19.79 | 20.09 |
| 0.80 | 33.80 | 33.43 | 32.36 | 20.18 | 19.83 | 20.07 |
| 0.90 | 34.11 | 33.81 | 32.46 | 20.37 | 20.00 | 20.39 |
| 1.00 | 34.24 | 33.70 | 32.49 | 20.74 | 20.30 | 20.74 |
| 1.10 | 34.72 | 34.14 | 32.92 | 20.51 | 20.18 | 20.53 |
| 1.20 | 34.36 | 33.82 | 32.69 | 20.51 | 20.31 | 20.53 |
| 1.30 | 34.20 | 34.30 | 33.00 | 20.90 | 20.52 | 20.89 |
| 1.40 | 34.39 | 34.48 | 33.39 | 20.85 | 20.50 | 20.73 |
| 1.50 | 35.43 | 35.30 | 33.28 | 20.54 | 20.36 | 20.54 |
| 1.60 | 34.60 | 34.54 | 33.06 | 20.61 | 20.29 | 20.47 |
| 1.70 | 34.75 | 34.32 | 34.18 | 20.59 | 20.27 | 20.57 |
| 1.80 | 34.41 | 34.71 | 33.65 | 21.05 | 20.71 | 21.02 |
| 1.90 | 34.89 | 34.97 | 33.91 | 21.01 | 20.67 | 20.99 |
| 2.00 | 35.27 | 35.33 | 34.91 | 21.07 | 20.72 | 21.03 |
| 2.10 | 35.29 | 35.29 | 34.63 | 21.08 | 20.79 | 21.05 |
| 2.20 | 35.30 | 35.44 | 33.79 | 21.01 | 20.83 | 20.97 |
| 2.30 | 35.73 | 36.15 | 35.44 | 20.73 | 20.54 | 20.76 |
| 2.40 | 35.02 | 35.29 | 34.40 | 20.82 | 20.55 | 20.77 |
| 2.50 | 35.37 | 35.05 | 35.69 | 21.34 | 21.01 | 21.26 |
| 2.60 | 35.23 | 35.16 | 34.72 | 21.55 | 21.19 | 21.60 |
| 2.70 | 36.61 | 35.24 | 34.75 | 20.93 | 20.67 | 20.87 |
| 2.80 | 35.27 | 36.08 | 36.59 | 21.09 | 20.84 | 21.01 |
| 2.90 | 35.51 | 35.40 | 34.71 | 21.27 | 20.96 | 21.16 |
| 3.00 | 35.37 | 35.77 | 36.26 | 20.99 | 20.83 | 20.88 |
| 3.10 | 35.24 | 35.14 | 35.79 | 21.21 | 21.08 | 21.11 |
| 3.20 | 35.79 | 35.91 | 34.83 | 21.75 | 21.45 | 21.65 |
| 3.30 | 35.77 | 35.82 | 35.00 | 21.24 | 21.10 | 21.25 |
| 3.40 | 36.05 | 35.78 | 35.16 | 20.95 | 20.86 | 20.83 |
| 3.50 | 36.04 | 36.06 | 37.12 | 21.21 | 20.97 | 21.11 |
| 3.60 | 35.50 | 35.32 | 36.18 | 21.64 | 21.36 | 21.55 |
| 3.70 | 36.24 | 36.44 | 37.06 | 21.72 | 21.59 | 21.62 |
| 3.80 | 35.89 | 35.76 | 35.85 | 21.52 | 21.39 | 21.42 |
| 3.90 | 35.80 | 35.73 | 35.99 | 21.33 | 21.24 | 21.25 |
| 4.00 | 35.51 | 36.19 | 37.35 | 21.28 | 21.13 | 21.28 |

[1] Includes test board loss

[2] Drain current was allowed to increase during compression measurement