## *Typical Performance Data*

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

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

TEST CONDITIONS: $V_{DD}$ = +6 V, $I_{DD}$ = 550 mA, $V_{GG}$ = -0.77 V, $I_{GG}$ = 0.81 mA, Temperature = +25°C

| FREQ | Gain | Isolation | Input Return Loss | Output Return Loss | Stability | | IP-3 Output $P_{OUT}$ = +16 dBm/Tone | 1dB Comp. Output | $P_{SAT}$ Output | Noise Figure |
|---|---|---|---|---|---|---|---|---|---|---|
| (GHz) | (dB) | (dB) | (dB) | (dB) | K | Measure | (dBm) | (dBm) | (dBm) | (dB) |
| 4.00 | 4.0 | -59.8 | -6.3 | -25.6 | 233.6 | 1.2 | 29.5 | 20.6 | 24.7 | 18.0 |
| 4.50 | 11.2 | -65.8 | -9.0 | -25.9 | 233.4 | 1.1 | 29.4 | 22.4 | 26.5 | 13.9 |
| 5.00 | 15.8 | -73.8 | -12.7 | -19.2 | 369.8 | 1.0 | 31.6 | 23.6 | 27.9 | 11.3 |
| 5.50 | 18.0 | -65.9 | -16.2 | -17.4 | 118.0 | 1.0 | 31.9 | 24.7 | 28.9 | 9.5 |
| 6.00 | 19.2 | -71.3 | -17.4 | -18.3 | 196.0 | 1.0 | 32.0 | 25.6 | 29.2 | 8.4 |
| 6.50 | 19.7 | -60.9 | -16.9 | -19.6 | 55.6 | 1.0 | 32.3 | 26.4 | 29.4 | 7.7 |
| 7.00 | 19.8 | -59.9 | -16.7 | -19.6 | 48.5 | 1.0 | 33.6 | 27.1 | 29.6 | 7.1 |
| 7.50 | 19.8 | -58.4 | -16.3 | -17.9 | 41.3 | 1.0 | 34.0 | 27.6 | 30.0 | 6.7 |
| 8.00 | 19.6 | -58.6 | -16.1 | -16.6 | 42.8 | 1.0 | 34.0 | 28.3 | 30.5 | 6.5 |
| 8.50 | 19.4 | -58.7 | -16.2 | -16.1 | 43.9 | 1.0 | 34.9 | 28.7 | 30.9 | 6.1 |
| 9.00 | 19.3 | -58.4 | -16.6 | -15.9 | 42.8 | 1.0 | 35.1 | 29.2 | 31.2 | 5.8 |
| 9.50 | 19.2 | -63.5 | -17.4 | -16.1 | 78.1 | 1.0 | 35.6 | 29.4 | 31.0 | 5.6 |
| 10.00 | 19.2 | -59.5 | -17.6 | -16.2 | 49.6 | 1.0 | 36.6 | 29.5 | 31.2 | 5.5 |
| 10.25 | 19.2 | -70.4 | -17.1 | -16.6 | 175.5 | 1.0 | 36.9 | 29.4 | 31.5 | 5.4 |
| 10.50 | 19.1 | -56.5 | -16.5 | -16.9 | 35.6 | 1.0 | 37.0 | 29.3 | 31.6 | 5.3 |
| 10.75 | 19.0 | -56.0 | -15.3 | -17.4 | 33.6 | 1.0 | 36.3 | 28.9 | 31.7 | 5.4 |
| 11.00 | 19.0 | -57.1 | -14.6 | -17.9 | 38.4 | 1.0 | 36.6 | 28.9 | 31.9 | 5.4 |
| 11.25 | 18.9 | -58.8 | -13.6 | -18.4 | 46.9 | 1.0 | 36.5 | 28.6 | 31.9 | 5.4 |
| 11.50 | 18.8 | -55.5 | -13.1 | -19.5 | 32.0 | 1.0 | 36.4 | 28.3 | 31.8 | 5.5 |
| 11.75 | 18.7 | -52.6 | -12.5 | -20.1 | 23.0 | 1.0 | 36.1 | 28.2 | 31.7 | 5.4 |
| 12.00 | 18.7 | -55.6 | -12.3 | -20.7 | 32.7 | 1.0 | 36.9 | 28.0 | 31.5 | 5.4 |
| 12.25 | 18.6 | -53.9 | -12.3 | -22.0 | 27.4 | 1.1 | 36.1 | 27.9 | 31.8 | 5.5 |
| 12.50 | 18.5 | -55.3 | -12.5 | -22.6 | 32.3 | 1.0 | 36.3 | 28.0 | 31.8 | 5.5 |
| 12.75 | 18.5 | -53.0 | -13.1 | -24.9 | 25.4 | 1.0 | 36.6 | 28.0 | 32.0 | 5.5 |
| 13.00 | 18.5 | -53.9 | -13.7 | -25.4 | 28.3 | 1.0 | 36.6 | 28.0 | 32.1 | 5.5 |
| 13.25 | 18.5 | -52.9 | -15.1 | -29.1 | 25.2 | 1.0 | 36.2 | 28.0 | 32.1 | 5.4 |
| 13.50 | 18.6 | -55.9 | -16.2 | -30.8 | 35.8 | 1.0 | 36.2 | 28.0 | 32.3 | 5.4 |
| 13.75 | 18.7 | -53.0 | -18.9 | -35.2 | 25.5 | 1.0 | 36.0 | 28.0 | 32.2 | 5.4 |
| 14.00 | 18.8 | -53.6 | -21.4 | -36.0 | 27.4 | 1.0 | 35.9 | 28.0 | 32.1 | 5.4 |
| 14.25 | 18.9 | -53.8 | -26.8 | -32.9 | 27.9 | 1.0 | 35.7 | 28.1 | 32.2 | 5.4 |
| 14.50 | 19.0 | -53.4 | -33.7 | -31.1 | 26.4 | 1.0 | 36.0 | 28.2 | 32.1 | 5.3 |
| 14.75 | 19.1 | -52.7 | -31.9 | -28.7 | 23.8 | 1.0 | 36.2 | 28.2 | 32.1 | 5.3 |
| 15.00 | 19.2 | -55.8 | -26.6 | -27.8 | 33.9 | 1.0 | 36.2 | 28.3 | 32.1 | 5.4 |
| 15.25 | 19.4 | -55.5 | -22.5 | -27.3 | 31.8 | 1.0 | 36.1 | 28.4 | 32.1 | 5.3 |
| 15.50 | 19.5 | -58.5 | -20.6 | -26.9 | 44.4 | 1.0 | 36.0 | 28.3 | 32.0 | 5.3 |
| 15.75 | 19.7 | -57.2 | -19.0 | -27.0 | 37.1 | 1.0 | 36.4 | 28.4 | 31.9 | 5.3 |
| 16.00 | 19.8 | -54.2 | -18.3 | -27.1 | 25.9 | 1.0 | 35.7 | 28.5 | 31.8 | 5.3 |
| 16.25 | 20.0 | -54.2 | -17.9 | -26.5 | 25.2 | 1.0 | 35.4 | 28.6 | 31.8 | 5.4 |
| 16.50 | 20.1 | -53.5 | -17.8 | -26.0 | 22.9 | 1.0 | 35.7 | 28.8 | 31.7 | 5.3 |
| 16.75 | 20.3 | -50.7 | -17.8 | -24.6 | 16.2 | 1.0 | 36.1 | 29.1 | 31.5 | 5.3 |
| 17.00 | 20.3 | -52.2 | -18.0 | -24.4 | 19.3 | 1.0 | 36.3 | 29.3 | 31.5 | 5.3 |
| 17.25 | 20.3 | -50.6 | -18.0 | -24.0 | 16.1 | 1.0 | 36.1 | 29.6 | 31.4 | 5.3 |
| 17.50 | 20.2 | -49.9 | -18.0 | -24.4 | 15.1 | 1.0 | 36.4 | 29.8 | 31.4 | 5.3 |
| 17.75 | 19.9 | -50.5 | -17.8 | -24.4 | 16.5 | 1.0 | 36.0 | 29.9 | 31.3 | 5.4 |
| 18.00 | 19.7 | -49.4 | -17.5 | -24.5 | 15.0 | 1.0 | 36.0 | 30.0 | 31.3 | 5.5 |
| 18.25 | 19.2 | -50.9 | -16.5 | -23.5 | 18.9 | 1.0 | 34.9 | 30.2 | 31.3 | 5.7 |
| 18.50 | 18.6 | -53.0 | -15.8 | -23.5 | 25.3 | 1.0 | 34.2 | 29.9 | 31.1 | 5.8 |
| 18.75 | 17.4 | -52.5 | -15.1 | -23.4 | 27.3 | 1.0 | 33.7 | 29.7 | 30.8 | 6.1 |
| 19.00 | 16.3 | -54.0 | -15.5 | -23.4 | 37.0 | 1.0 | 33.2 | 29.3 | 30.6 | 6.3 |
| 19.25 | 14.2 | -53.3 | -18.1 | -22.9 | 44.1 | 1.0 | 32.5 | 28.8 | 30.2 | 6.8 |
| 19.50 | 12.5 | -56.7 | -21.6 | -22.9 | 80.1 | 1.0 | 31.5 | 28.4 | 29.6 | 7.3 |
| 19.75 | 9.7 | -53.8 | -23.8 | -22.9 | 80.0 | 1.0 | 29.8 | 27.6 | 28.3 | 8.1 |
| 20.00 | 7.6 | -55.3 | -20.1 | -23.6 | 118.9 | 1.0 | 29.8 | 27.1 | 27.8 | 8.8 |