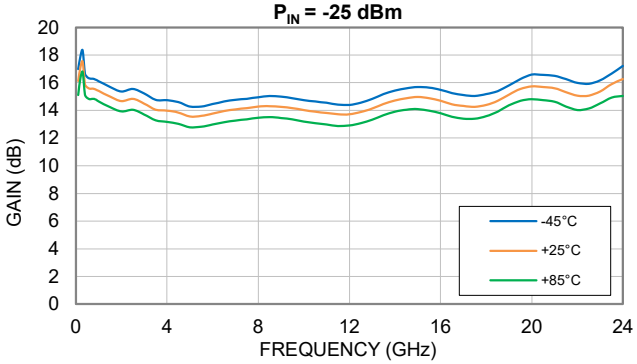
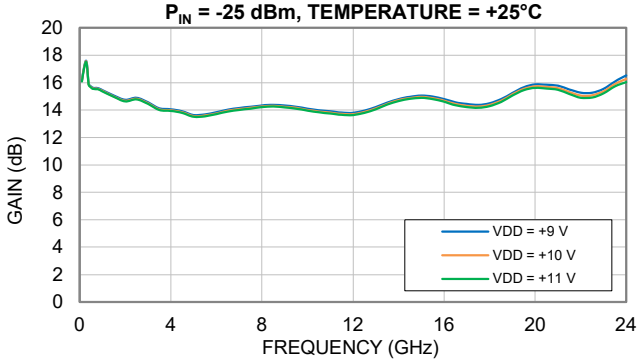
Typical Performance Curves

Note: Data over temperature was taken at V_{DD} = +10 V. At +25°C, V_{GG1} has been adjusted to achieve I_{DD} = 300 mA. V_{GG1} was not adjusted at -45°C or +85°C. For over voltage data, V_{GG1} was adjusted until I_{DD} = 300 mA at all V_{DD} levels specified. All data taken with V_{GG2} = +3.5 V.

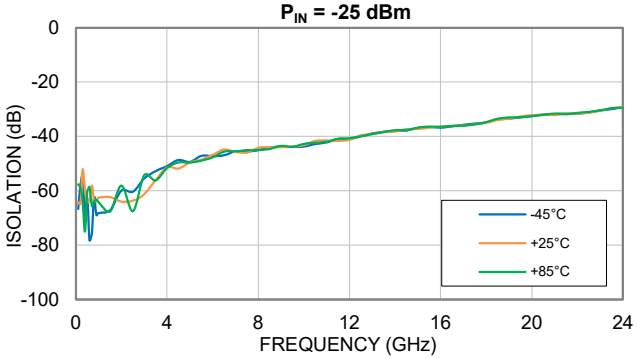
GAIN vs. TEMPERATURE
P_{IN} = -25 dBm



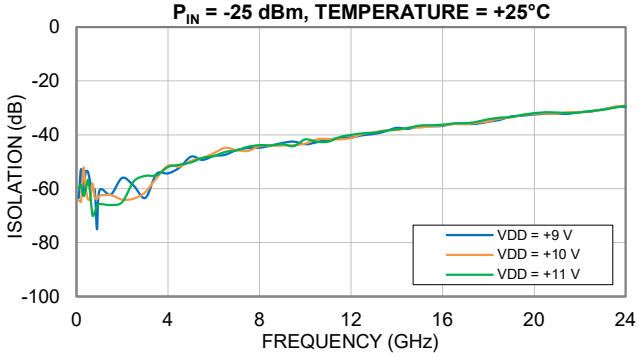
GAIN vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



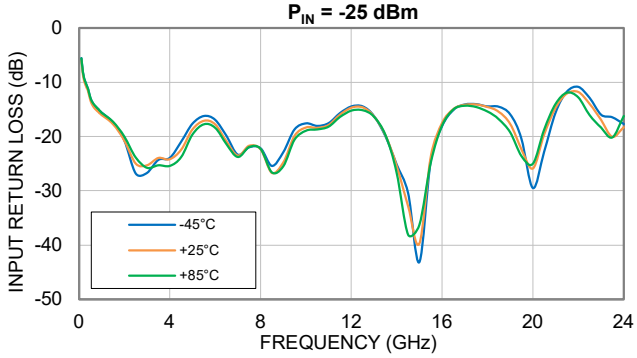
ISOLATION vs. TEMPERATURE
P_{IN} = -25 dBm



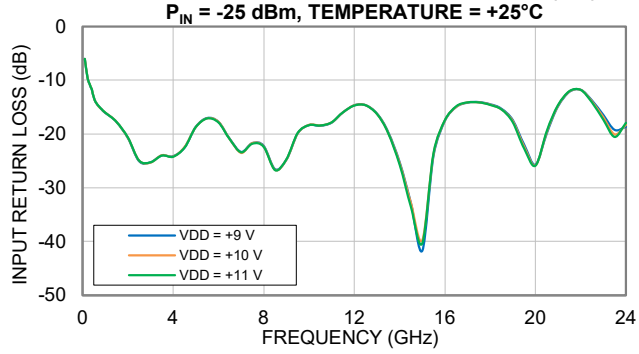
ISOLATION vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



INPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



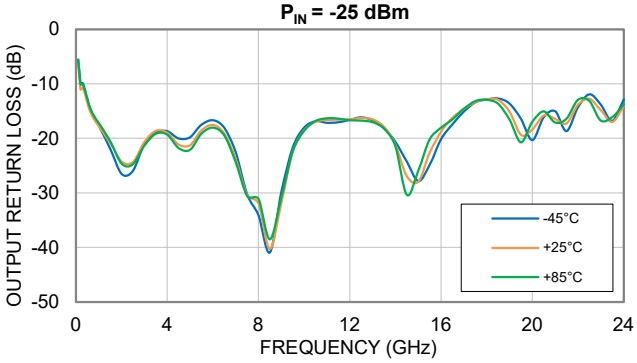
INPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



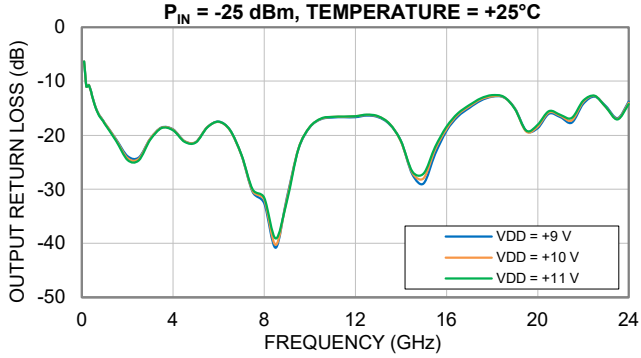
Typical Performance Curves

Note: Data over temperature was taken at V_{DD} = +10 V. At +25°C, V_{GG1} has been adjusted to achieve I_{DD} = 300 mA. V_{GG1} was not adjusted at -45°C or +85°C. For over voltage data, V_{GG1} was adjusted until I_{DD} = 300 mA at all V_{DD} levels specified. All data taken with V_{GG2} = +3.5 V.

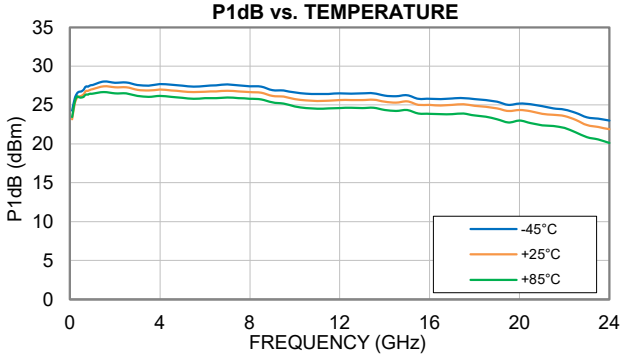
OUTPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



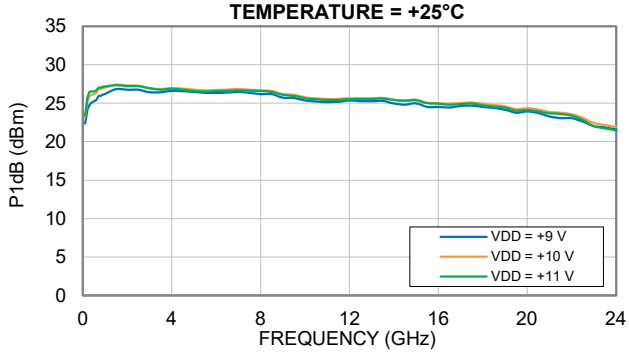
OUTPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



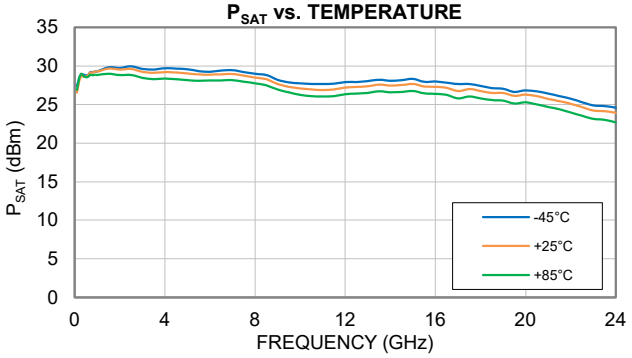
P1dB vs. TEMPERATURE



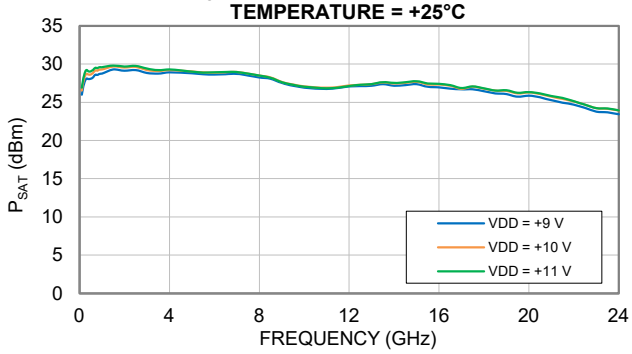
P1dB vs. DEVICE VOLTAGE (V_{DD})
TEMPERATURE = +25°C



P_{SAT} vs. TEMPERATURE



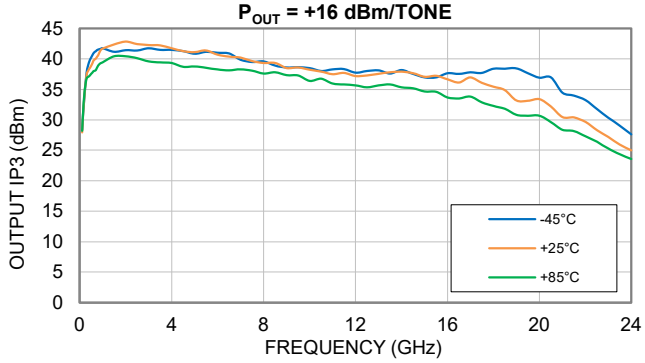
P_{SAT} vs. DEVICE VOLTAGE (V_{DD})
TEMPERATURE = +25°C



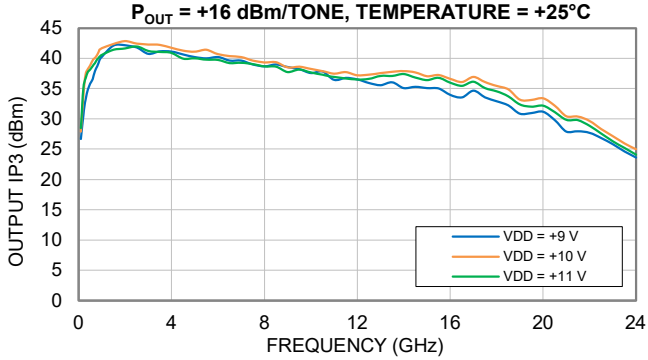
Typical Performance Curves

Note: Data over temperature was taken at V_{DD} = +10 V. At +25°C, V_{GG1} has been adjusted to achieve I_{DD} = 300 mA. V_{GG1} was not adjusted at -45°C or +85°C. For over voltage data, V_{GG1} was adjusted until I_{DD} = 300 mA at all V_{DD} levels specified. All data taken with V_{GG2} = +3.5 V.

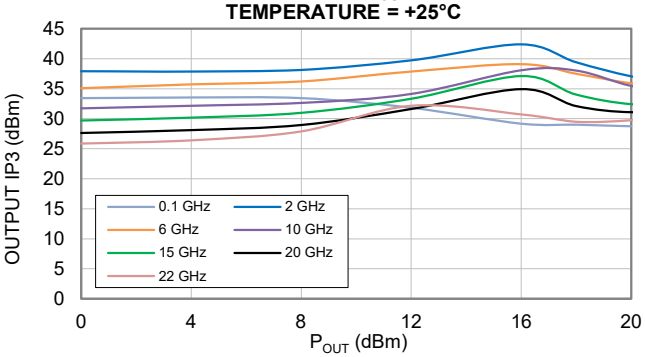
OUTPUT IP3 vs. TEMPERATURE
P_{OUT} = +16 dBm/TONE



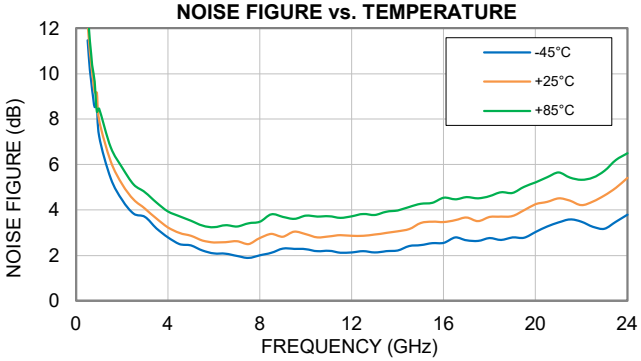
OUTPUT IP3 vs. DEVICE VOLTAGE (V_{DD})
P_{OUT} = +16 dBm/TONE, TEMPERATURE = +25°C



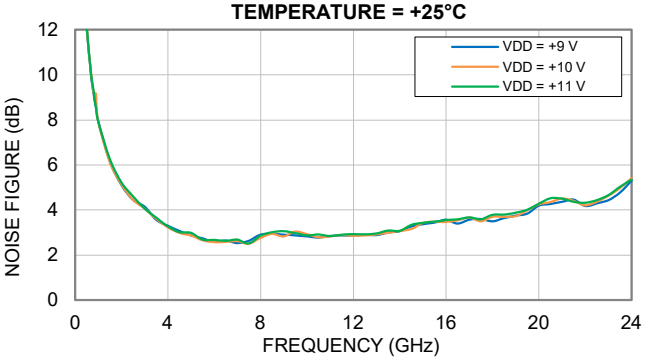
OIP3 vs. P_{OUT}
TEMPERATURE = +25°C



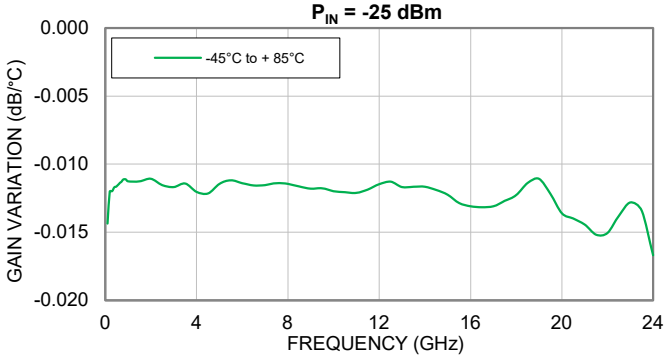
NOISE FIGURE vs. TEMPERATURE



NOISE FIGURE vs. DEVICE VOLTAGE (V_{DD})
TEMPERATURE = +25°C

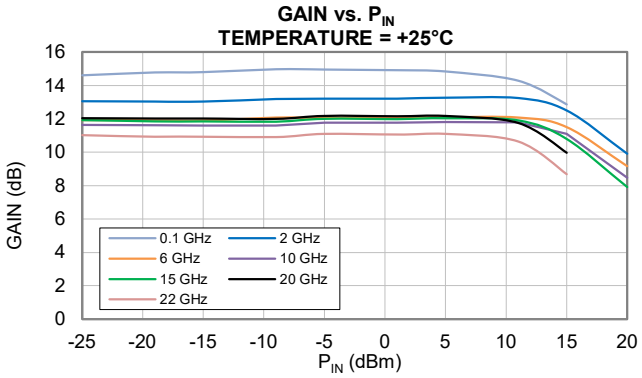


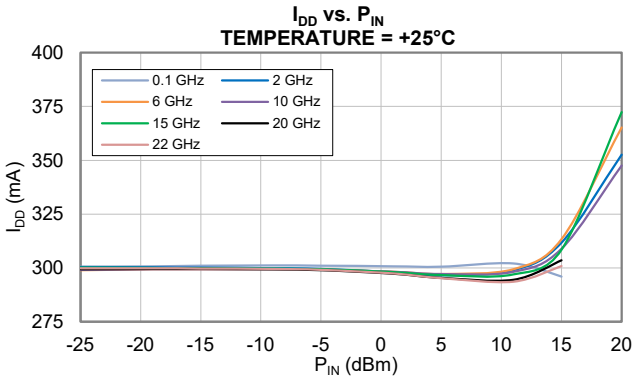
GAIN VARIATION vs. TEMPERATURE
P_{IN} = -25 dBm



Typical Performance Curves

Note: Data over temperature was taken at V_{DD} = +10 V. At +25°C, V_{GG1} has been adjusted to achieve I_{DD} = 300 mA. V_{GG1} was not adjusted at -45°C or +85°C. For over voltage data, V_{GG1} was adjusted until I_{DD} = 300 mA at all V_{DD} levels specified. All data taken with V_{GG2} = +3.5 V.

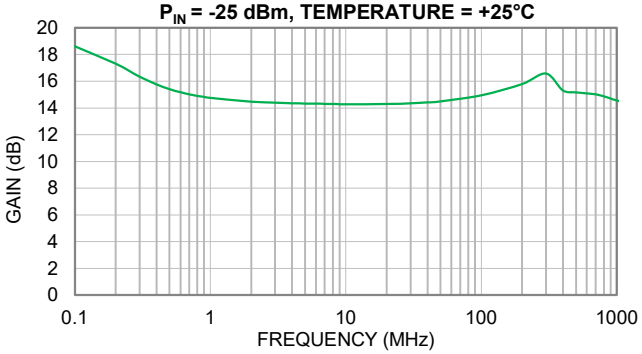




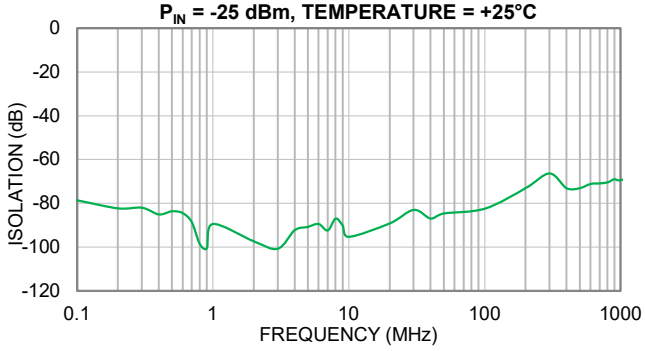
Typical Performance Curves

Note: Data was taken at V_{DD} = +10 V and V_{GG2} = +3.5 V. At +25°C, V_{GG1} has been adjusted to achieve I_{DD} = 300 mA. Data was taken on a modified TB-AVA-223MPC+ test board using an external bias tee. See Figure 3.

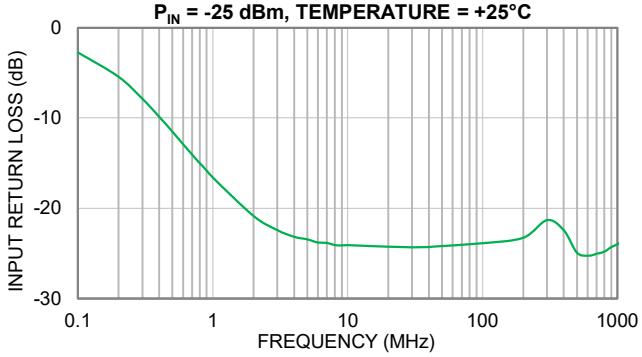
GAIN vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



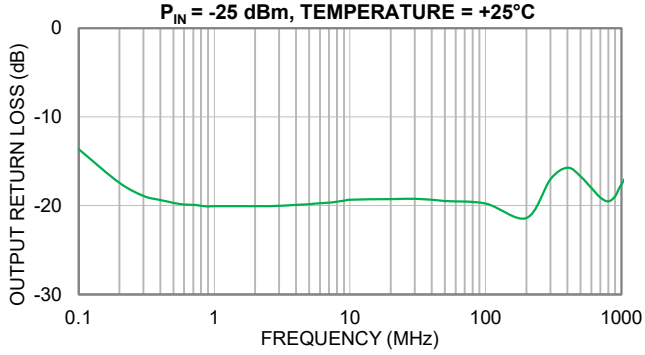
ISOLATION vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



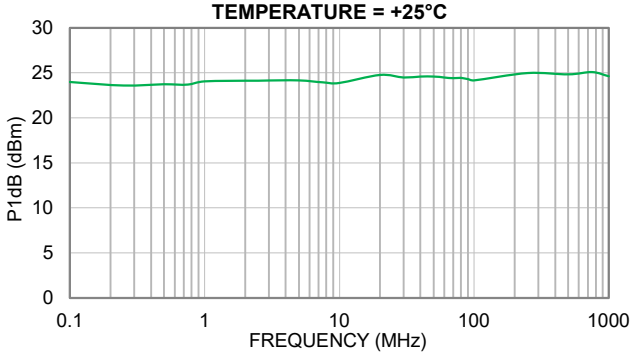
INPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



OUTPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



P1dB vs. FREQUENCY
TEMPERATURE = +25°C



OUTPUT IP3 vs. FREQUENCY
P_{OUT} = +16 dBm/TONE, TEMPERATURE = +25°C