

RF AMPLIFIER

MODEL QBH-2001

Available as: QBH-2001, SM (E52-Gen2SMT)

Features

- High Volume Package
- High Dynamic Range LNA
- Noise Figure 0.9 dB Typical
- 3rd Order Intercept Point +33 dBm Typical
- No External Components Required

Specifications

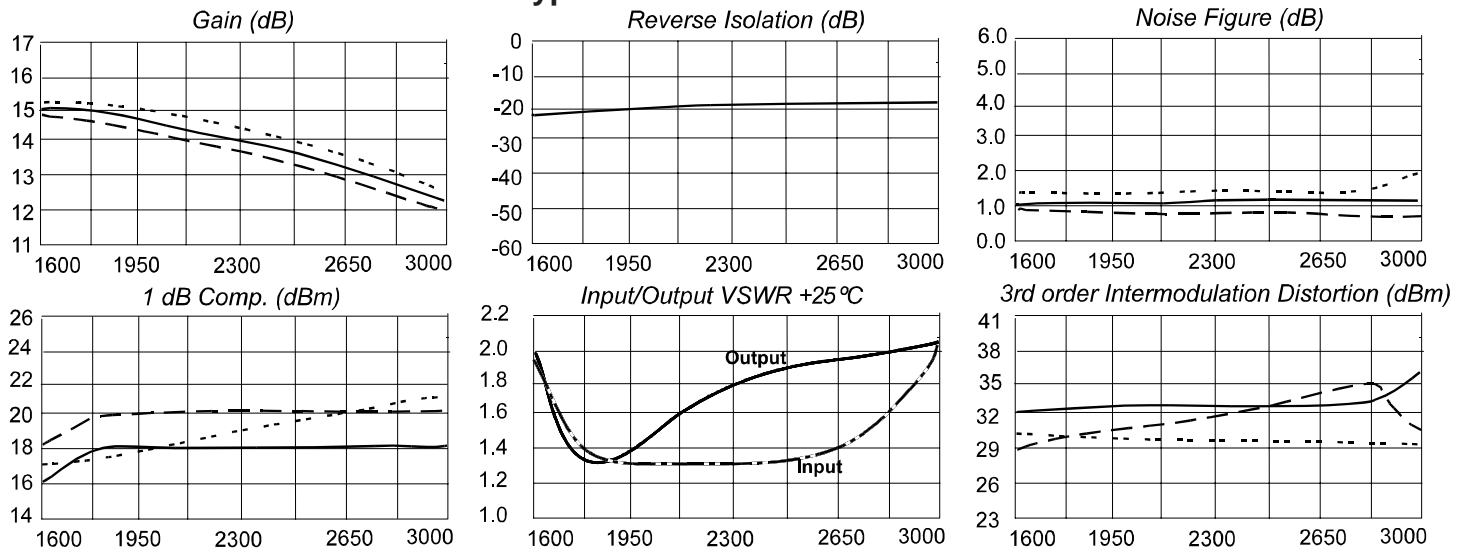
CHARACTERISTIC	TYPICAL Ta= +25 °C	MIN/ MAX Ta= +25 °C
Frequency	1600 -3000 MHz	1800 - 2200 MHz
Gain (dB)	—	13 Min.
Gain Flatness	—	+/-0.4 Max.
Reverse Isolation (dB)	20	—
VSWR In	1.5:1	—
VSWR Out	1.5:1	—
1 dB Compression (dBm)	—	+17 Min.
Output Intercept Point 3rd Order	—	+32 Min.
2nd Order	—	—
Noise Figure (dB)	1.0	—
Power Vdc	5	—
mA	66	—

Maximum Ratings

Ambient Operating Temperature -40°C to +85 °C
 Storage Temperature -65°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +16 Volts
 Continuous RF Input Power +10 dBm
 Short Term RF Input Power 20 Milliwatts (1 Minute Max.)
 Maximum Peak Power 50 Milliwatts (3 μsec Max.)

Note: Specifications are guaranteed when tested in a 50 Ohm system.
 Specifications indicated as typical are not guaranteed.

Typical Performance Data



Legend ——— +25 °C - - - - +85 °C ······ -40 °C

Linear S-Parameters Data

FREQ. MHz	-- S11 -- dB Ang		-- S21 -- dB Ang		-- S12 -- dB Ang		-- S22 -- dB Ang	
1800	-14.7	-14.1	15.1	-43.7	-21.3	-101.8	-16.4	111.9
1870	-16.3	-22.3	15.0	-58.5	-21.0	-113.6	-18.4	110.3
1890	-16.7	-24.3	15.0	-62.7	-21.0	-116.9	-18.7	110.6
1900	-16.9	-25.0	15.0	-64.8	-20.9	-118.7	-18.8	110.8
1950	-17.7	-27.5	14.9	-75.3	-20.7	-126.9	-18.6	112.4
2000	-18.4	-23.7	14.8	-85.6	-20.6	-135.2	-17.6	114.5
2100	-19.3	21.5	14.5	-105.9	-20.3	-151.3	-15.4	117.7
2150	-19.0	43.3	14.4	-115.9	-20.1	-159.3	-14.5	117.1
2200	-18.6	50.8	14.3	-125.9	-20.0	-167.0	-13.7	115.3



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