RF AMPLIFIER
MODEL QBH-4008

Available as: QBH-4008, 4 Pin TO-8 (080-10114-0001)
QBH-9-4008, Connectorized Housing (ES E52-1501)

Features

- High Gain: 10.0 dB Typical
- High Power: +27 dBm Typical
- Operating Temp. -55 ºC to +85 ºC
- Environmental Screening Available

Specifications

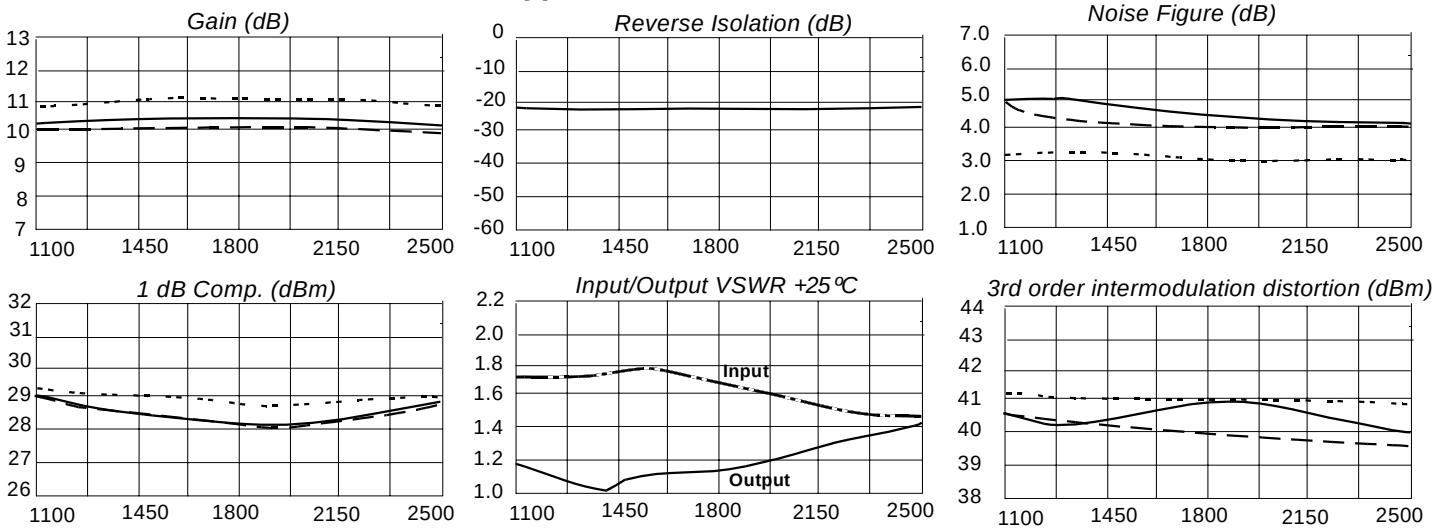
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	1100 - 2500 MHz	1100 - 2500 MHz
Gain (dB)	10.0 ± 1.0	—
Gain vs. Temperature	—	+0.8/-0.8 Max.
Gain Flatness	2.0	2.0 Max.
Reverse Isolation (dB)	-20	-20 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+27	+26 Min.
Output Intercept point		
3rd Order	+40	+38 Min.
2nd Order	+50	+47 Min.
Noise Figure (dB)	6.0	6.0 Max.
Power Vdc	+15	+15
mA	225	225 Max.

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to +125 ºC
Storage Temperature ..... -65ºC to +150 ºC
Case Temperature ..... +125 ºC
DC Voltage ..... +17 Volts
Continuous RF Input Power ..... +13 dBm
Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (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 ºC* – – – *+85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 Ang
1100	-11.7	100.2	10.4	-5.4	-22.6	-143.4	-22.8	26.6
1400	-11.7	58.4	10.4	-59.5	-23.1	175.6	-32.7	35.4
1600	-11.4	26.8	10.6	-96.2	-22.6	149.3	-25.1	62.8
1700	-11.7	8.5	10.6	-114.9	-22.6	134.9	-23.5	57.9
1900	-12.6	-29.8	10.6	-152.7	-22.6	105.7	-20.3	38.5
2100	-13.4	-72.0	10.6	168.6	-22.4	76.5	-17.9	10.9
2200	-13.8	-94.9	10.6	148.7	-22.2	61.1	-17.3	-5.5
2400	-14.4	-147.0	10.4	107.9	-21.8	29.9	-15.8	-41.5
2500	-14.5	-175.8	10.3	86.9	-21.6	13.8	-14.7	-59.9

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