RF AMPLIFIER MODEL QBH-5409

Available as: QBH-5409, F-Pack (E52-18563)

Features

- High Gain: 10.0 dB Typical
- High Power: +25.5 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	10 - 2000 MHz	10 - 2000 MHz
Gain (dB)	10.0 ± 1.0	—
Gain vs. Temperature	—	+1.0/-1.0 Max.
Gain Flatness	1.0	1.4 Max.
Reverse Isolation (dB)	-16	-16 Min.
VSWR In	2.0:1	2.0:1 Max.
Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+25.5	+25.5 Min.
Output Intercept point		
3rd Order	+39	+37 Min.
2nd Order	+46	+44 Min.
Noise Figure (dB)	4.5	5.5 Max.
Power Vdc	+15	+15
mA	195	205 Max.

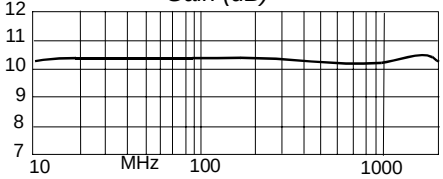
Maximum Ratings

Ambient Operating Temperature ..... -55ºC to +85 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.)

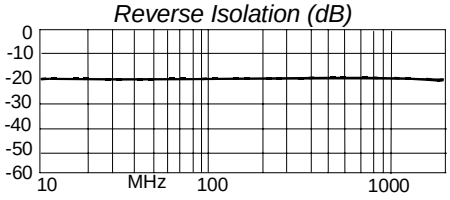
Note:
1. Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.
2. Noise Figures increase below 500 NHz

Typical Performance Data

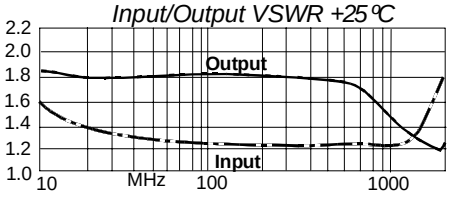
Gain (dB)



Reverse Isolation (dB)



Input/Output VSWR +25ºC



Legend ——— *+ 25 ºC*

Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 Ang
10	-12.7	-105.6	10.4	-156.7	-18.5	11.1	-10.6	155.2
60	-18.5	-168.7	10.5	172.9	-18.9	-7.5	-10.8	169.7
90	-18.7	-179.1	10.5	165.7	-19.0	-12.4	-10.8	165.9
400	-18.4	123.8	10.4	103.7	-19.1	-55.8	-11.2	118.4
700	-18.1	80.1	10.3	45.7	-19.2	-97.3	-11.9	71.6
1000	-18.4	47.1	10.4	-12.9	-19.3	-138.6	-13.6	25.5
1400	-17.4	22.3	10.5	-93.1	-19.5	166.2	-17.6	-23.9
1700	-14.5	-5.1	10.5	-155.8	-19.8	125.2	-20.4	-31.8
2000	-11.2	-49.2	10.4	138.4	-19.9	85.5	-18.2	-36.9

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