RF Amplifier
High Gain: 22.5 dB

Model QBH-8756
1850 to 1910 MHz

Features

- High Gain: 22.5 dB Typical
- High Power: +20 dBm Typical
- Environmental Screening Available

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to +125 ºC
Storage Temperature ..... -65ºC to + 150 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 15.5 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.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX
Frequency	1850 - 1910 MHz	—
Gain (dB)	22.5 ±0.5	—
Gain vs. Temperature	—	—
Gain Flatness	0.7	—
Reverse Isolation (dB)	-40	—
VSWR In Out	1.5:1 1.5:1	—
1 dB Compression (dBm)	+20	—
Output Intercept point 3rd Order 2nd Order	 +35 —	—
Noise Figure (dB)	1.0	—
Power Vdc mA	+15 210	—

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

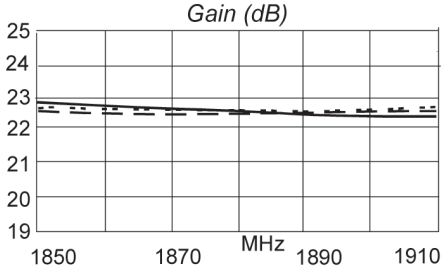
Packaging Options (see Appendix)

QBH-8756, Hybrid SM (E52-19422)

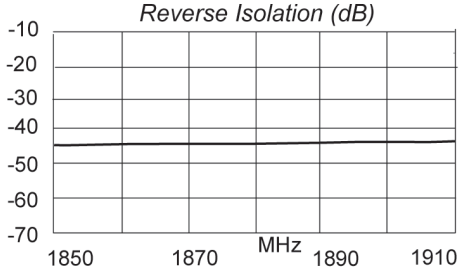
Legend ——— + 25 ºC – – – + 70 ºC - - - - - - -40 ºC

Typical Performance Data

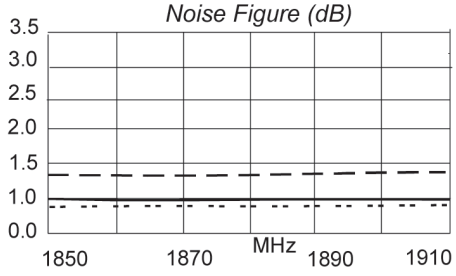
Gain (dB)



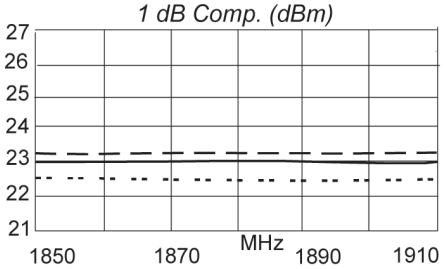
Reverse Isolation (dB)



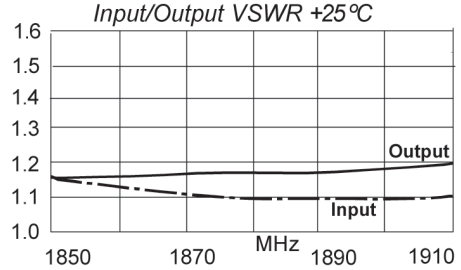
Noise Figure (dB)



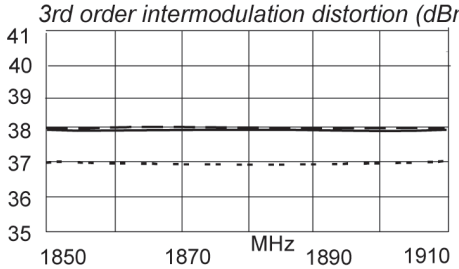
1 dB Comp. (dBm)



Input/Output VSWR +25ºC



3rd order intermodulation distortion (dBm)



Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 Ang
1850	-24.0	107.5	22.8	-66.5	-44.2	-165.5	-23.9	115.3
1860	-25.6	114.7	22.7	-68.9	-43.9	-175.4	-23.4	114.0
1870	-27.7	119.8	22.7	-71.5	-44.4	-172.5	-22.9	112.5
1880	-29.9	124.0	22.6	-74.0	-44.1	-174.4	-22.5	110.8
1890	-30.4	130.0	22.5	-76.6	-44.1	-175.1	-22.1	107.9
1900	-28.0	137.0	22.4	-79.0	-43.9	-175.8	-21.8	106.5
1910	-26.6	143.4	22.3	-81.6	-44.2	-174.5	-21.5	104.8

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