RF Amplifier
High Gain: 15.8 dB

Model QBH-8713
890 to 915 MHz

Features

- High Gain: 15.8 dB Typical
- High Power: +27 dBm Typical
- Operating Temp. - 40 ºC to +70 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -40 ºC to +70 ºC
Frequency	890 - 915 MHz	890 - 915 MHz
Gain (dB)	15.8 Min.	—
Gain vs. Temperature	—	+1.5 Max.
Gain Flatness	0.3	0.6 Max.
Reverse Isolation (dB)	-21	-19 Min.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.6:1	2.0:1 Max.
1 dB Compression (dBm)	+27	+26 Min.
Output Intercept point		
3rd Order	+42	+39 Min.
2nd Order	—	—
Noise Figure (dB)	1.0	1.5 Max.
Power Vdc	+15	+15
Power mA	150	170 Max.

Maximum Ratings

Ambient Operating Temperature ..... -55 ºC to +125 ºC
Storage Temperature ..... -65 ºC to + 150 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 20 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:

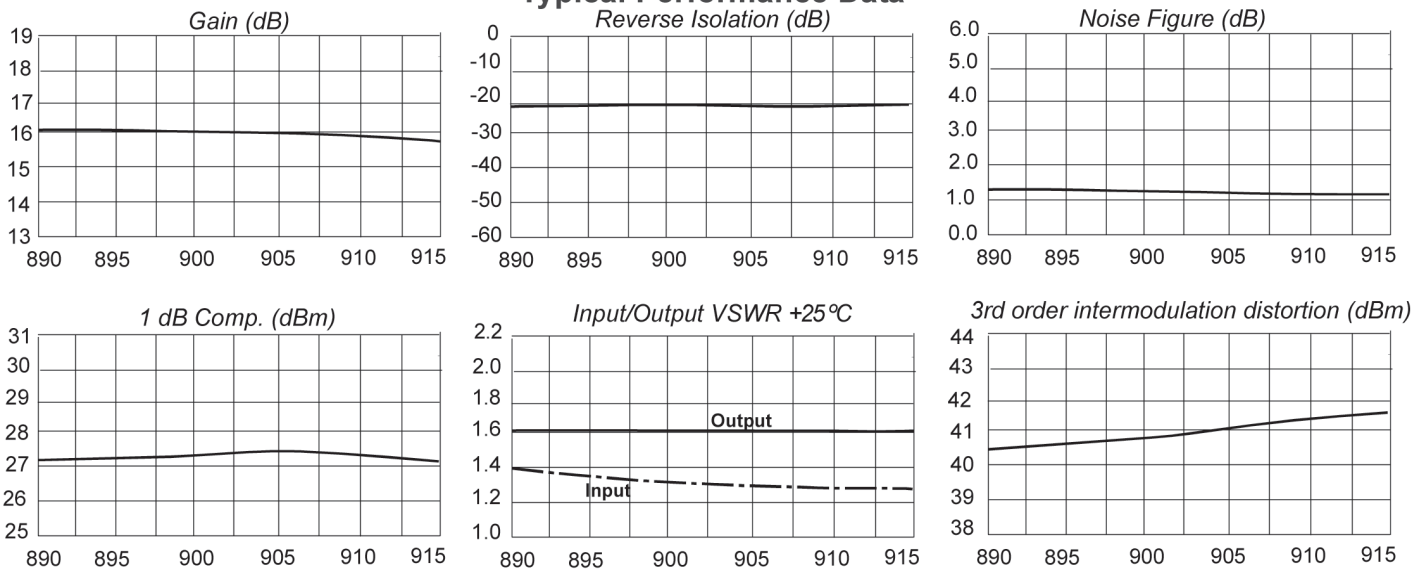
1. Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

Packaging Options (see Appendix)

QBH-8713, Hybrid SM (E52-19422)

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

Typical Performance Data



Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 Ang
890	-15.8	54.6	15.9	-42.4	-20.7	-58.4	-12.8	-118.1
895	-16.4	41.7	15.9	-44.7	-20.6	-60.8	-12.8	-122.5
900	-17.0	26.9	15.9	-47.0	-20.6	-62.3	-12.8	-127.1
905	-17.5	10.1	15.8	-49.2	-20.5	-64.3	-12.8	-131.7
910	-17.8	-7.0	15.8	-51.5	-20.5	-66.5	-12.8	-136.1
915	-17.9	-21.7	15.7	-53.7	-20.4	-68.2	-12.8	-140.6

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