

RF AMPLIFIER

MODEL QBH-8720

Available as: QBH-8720, Hybrid SM (E52-19422)

Features

- High Gain: 24.5 dB Typical
- High Power: +23 dBm Typical
- Operating Temp. - 40 °C to +70 °C
- Environmental Screening Available

Specifications

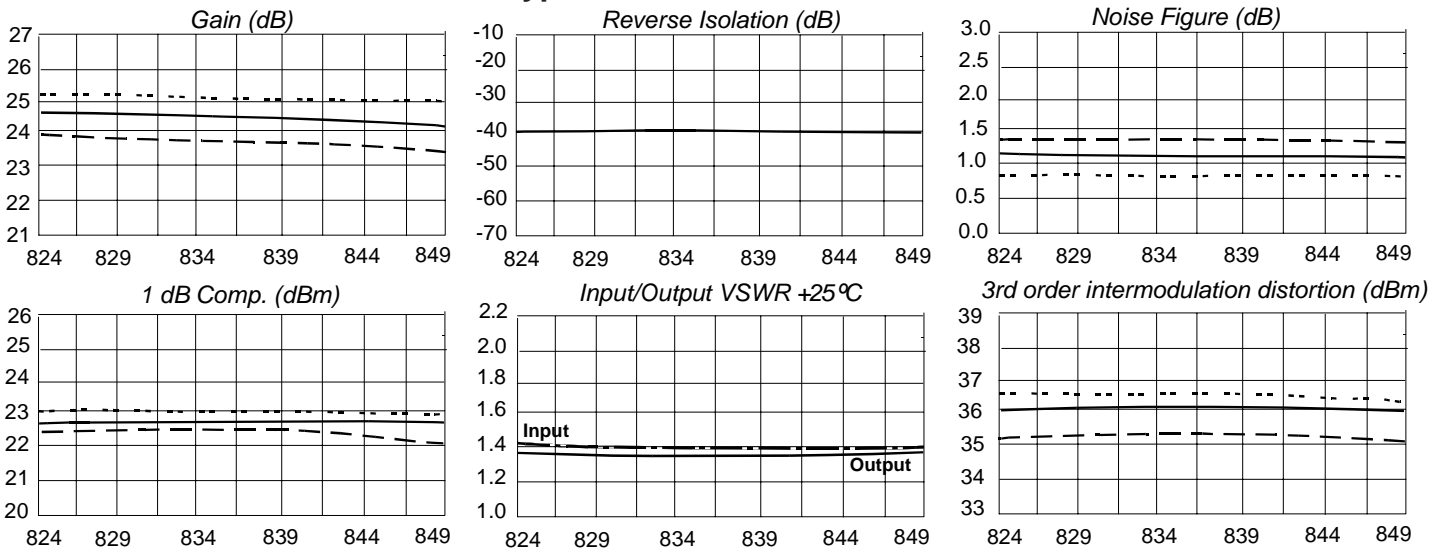
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +70 °C
Frequency	824 - 849 MHz	824 - 849 MHz
Gain (dB)	24.5	—
Gain vs. Temperature	—	+2.0 Max.
Gain Flatness	0.4	0.6 Max.
Reverse Isolation (dB)	-40	-36 Min.
VSWR In	1.4:1	2.0:1 Max.
VSWR Out	1.4:1	2.0:1 Max.
1 dB Compression (dBm)	+23	+21 Min.
Output Intercept point 3rd Order	+36	+33 Min.
2nd Order	—	—
Noise Figure (dB)	1.2	1.7 Max.
Power Vdc	+15	+15
mA	140	175 Max.

Maximum Ratings

Ambient Operating Temperature -55 °C to +125 °C
 Storage Temperature -65 °C to + 150 °C
 Case Temperature + 125 °C
 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.

Typical Performance Data



Legend ——— + 25 °C - - - - + 70 °C ······ -40 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
825	-15.3 136.5	24.6 165.6	-40.8 46.4	-16.8 51.0
830	-15.4 131.8	24.5 163.9	-40.6 46.8	-16.7 48.7
835	-15.5 126.4	24.4 162.2	-40.7 48.7	-16.6 46.6
840	-15.5 121.1	24.3 160.6	-40.8 47.3	-16.5 44.5
845	-15.4 115.8	24.3 158.8	-40.7 44.6	-16.4 42.4



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 03/11/05

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001