

RF AMPLIFIER

MODEL QBH-867

Available as: QBH-867, 4 Pin TO-8 (T4)
 QBH-9-867, Connectorized Housing (ES E52-1501)

Features

- High Gain: 11.0 dB Typical
- High Power: +26 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

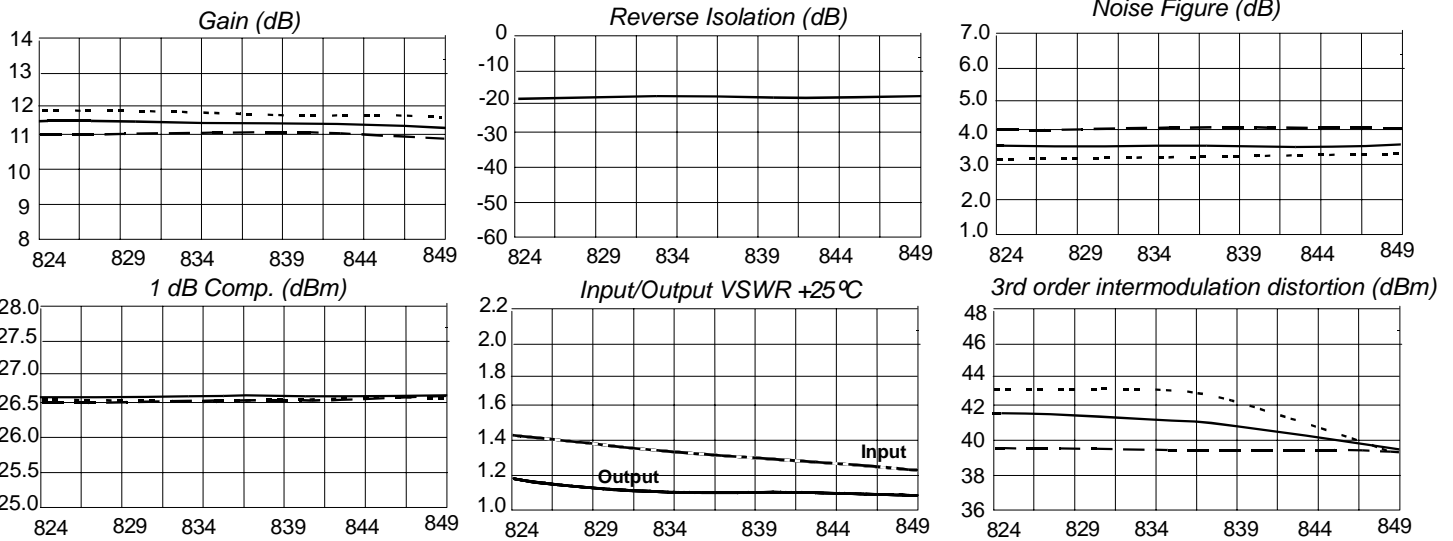
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	824 - 849 MHz	824 - 849 MHz
Gain (dB)	11.0 ± 0.7	—
Gain vs. Temperature	—	+0.6/-0.6 Max.
Gain Flatness	0.6	0.6 Max.
Reverse Isolation (dB)	-15	-15 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+26	+25 Min.
Output Intercept point 3rd Order	+40	+40 Min.
2nd Order	—	—
Noise Figure (dB)	4.2	4.5 Max.
Power Vdc	+13	+13
mA	130	135 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: Specifications are guaranteed when tested in a 50 Ohm system.
 Specifications indicated as typical are not guaranteed.

Typical Performance Data



Legend ——— + 25 °C - - - - + 85 °C ······ -55 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
824	-15.1 163.8	11.4 -93.2	-18.1 -95.0	-22.6 -173.2
829	-16.0 157.2	11.4 -95.9	-18.0 -97.7	-23.8 -169.9
834	-17.0 149.4	11.3 -98.7	-18.0 -100.5	-25.0 -163.9
839	-18.0 139.8	11.3 -101.5	-17.9 -103.2	-26.3 -153.5
844	-19.1 128.0	11.3 -104.3	-17.8 -105.9	-27.3 -136.7
849	-20.1 113.0	11.3 -107.1	-17.8 -108.5	-28.0 -115.4



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