

RF AMPLIFIER

Available as: QBS-227, Housing (E52-19659)

MODEL QBS-227

Features

- High Gain: 42.0 dB Typical
- High Power: +39 dBm Typical
- Operating Temp. - 20 °C to +60 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -20 °C to +60 °C
Frequency	860 - 910 MHz	860 - 910 MHz
Gain (dB)	42.0 ± 1.0	—
Gain vs. Temperature	—	+2.0/ -2.0 Max.
Gain Flatness	1.5	—
Reverse Isolation (dB)	-60	-60 Min.
VSWR In	2.0:1	2.0:1 Max.
Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+39	+38 Min.
Output Intercept point 3rd Order	+49	+48 Min.
2nd Order	—	—
Power Vdc	24	24
mA	3500	3600 Max.

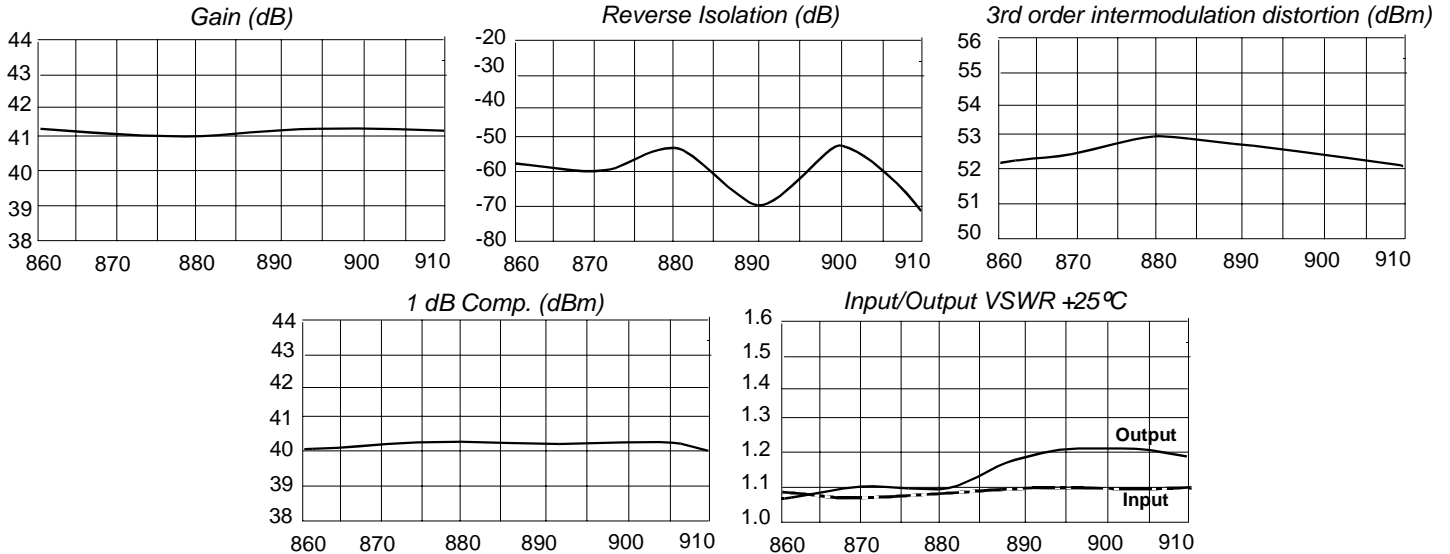
Maximum Ratings

Ambient Operating Temperature -20 °C to +60 °C
 Storage Temperature -55 °C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 30 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

Linear S-Parameters Data

FREQ. MHz	-- S11 --		-- S21 --		-- S12 --		-- S22 --	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
860	-29.7	40.8	41.2	-123.0	-56.9	144.5	-28.1	-145.3
870	-29.3	55.6	41.0	-148.4	-59.1	26.9	-25.6	124.6
880	-27.5	59.1	41.1	-173.0	-53.3	-9.1	-27.2	131.0
890	-26.0	50.3	41.3	160.2	-68.1	93.5	-20.5	89.4
900	-25.8	46.9	41.3	132.3	-54.3	27.7	-19.9	111.9
910	-25.4	28.5	41.2	104.4	-71.1	-32.2	-21.0	93.4



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