

RF AMPLIFIER

MODEL QBS-227

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

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.
VSWR 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.

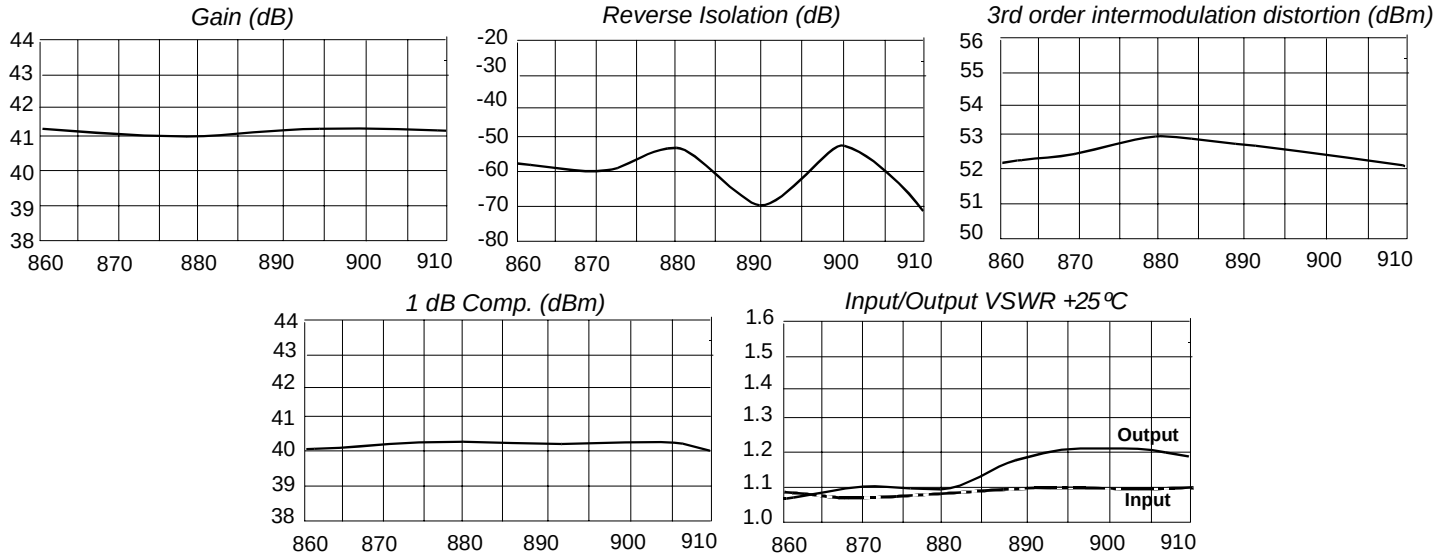
Maximum Ratings

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 -- dB Ang	-- S21 -- dB Ang	-- S12 -- dB Ang	-- S22 -- 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



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