

RF AMPLIFIER

MODEL QBS-230

Available as: QBS-230, Housing (E52-19740)

Features

- High Gain: 39.0 dB Typical
- High Power: +43 dBm Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL T _a = 25 °C	MIN/MAX
Frequency	800 - 960 MHz	
Gain (dB)	39.0 ± 1.0	—
Gain vs. Temperature	—	—
Gain Flatness	2.0	—
Reverse Isolation (dB)	-50	—
VSWR In	1.5:1	
Out	1.5:1	
1 dB Compression (dBm)	+43	—
Output Intercept point 3rd Order	+53	
2nd Order	—	—
Power Vdc	12.5	
mA	7000	—

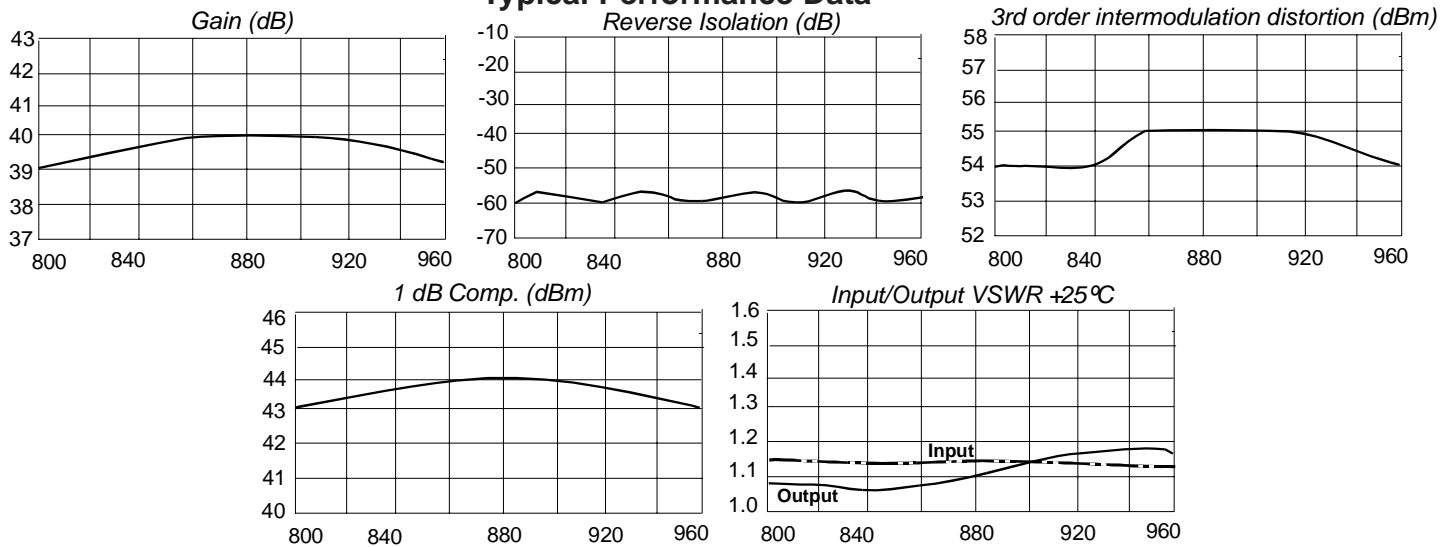
Maximum Ratings

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
800	-24.5 -130.9	39.0 134.3	-60.8 -178.0	-30.7 111.0
830	-24.5 -130.9	39.5 84.3	-58.6 114.5	-31.7 101.9
850	-24.7 -140.2	39.7 50.7	-57.7 90.8	-29.1 81.8
870	-24.9 -145.9	39.8 17.1	-59.6 -159.5	-28.6 69.6
890	-24.8 -151.0	39.9 -17.1	-57.4 55.2	-26.1 56.8
910	-25.1 -156.5	39.9 -51.6	-60.2 160.6	-23.0 82.3
930	-25.4 -160.7	39.7 -86.1	-54.9 92.6	-23.1 67.7
950	-25.5 -167.6	39.5 -121.2	-59.6 33.4	-22.3 55.7
960	-25.6 -166.8	39.4 -139.1	-59.2 30.0	-22.9 83.3



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