

RF AMPLIFIER

MODEL QBS-158

Available as: QBS-158, Housing (E52-19250)

Features

- High Gain: 21.5 dB Typical
- High Power: +33 dBm Typical
- Operating Temp. - 40 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +85 °C
Frequency	800 - 960 MHz	800 - 960 MHz
Gain (dB)	21.5 ± 0.5	—
Gain vs. Temperature	—	+0.5/ -0.2 Max.
Gain Flatness	1.0	1.0 Max.
Reverse Isolation (dB)	24	—
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+33	+33 Min.
Output Intercept point 3rd Order	+50	+50 Min.
2nd Order	—	—
Noise Figure (dB)	2.5	3.0 Max.
Power Vdc	14-28	14-28
mA	790	—

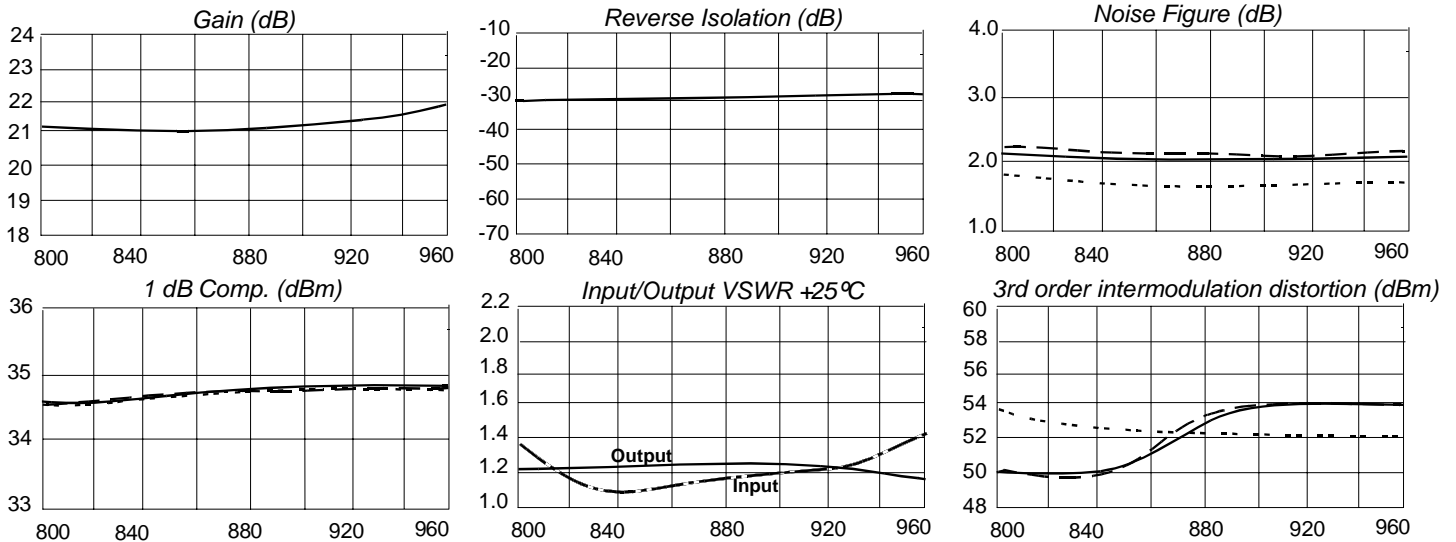
Maximum Ratings

Ambient Operating Temperature -40 °C to +85 °C
 Storage Temperature -55 °C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 28 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 - - - - + 85 °C ······ -40 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
800	-17.1 12.0	21.2 79.7	-29.5 16.9	-20.1 14.1
840	-27.0 -74.8	21.0 51.4	-28.8 -11.5	-18.6 4.0
880	-20.9 179.8	21.1 21.9	-28.4 -40.8	-17.9 -12.7
920	-19.5 158.2	21.4 -9.8	-27.7 -71.3	-18.5 -37.9
960	-15.1 -159.8	22.0 -47.8	-26.7 -108.6	-22.2 -96.6



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