

RF AMPLIFIER

MODEL QBS-256

Available as: QBS-256, Housing (E52-19500)

Features

- High Gain: 24.0 dB Typical
- High Power: +33 dBm Typical
- Operating Temp. - 20 °C to +70 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -20 °C to +70 °C
Frequency	1800 - 2000 MHz	1800 - 2000 MHz
Gain (dB)	24.0 ± 1.0	—
Gain vs. Temperature	—	+2.0/ -2.0 Max.
Gain Flatness	1.5	—
Reverse Isolation (dB)	-35	—
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+33	+32 Min.
Output Intercept point 3rd Order	+47	+45 Min.
2nd Order	—	—
Power Vdc	15	—
mA	950	—

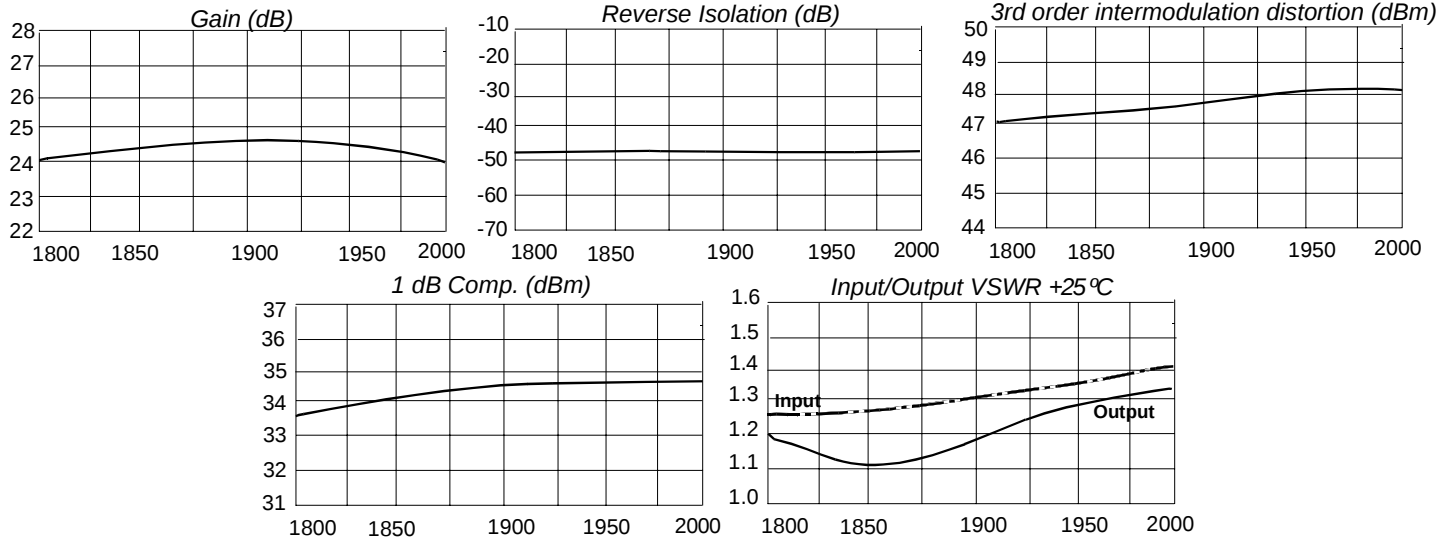
Maximum Ratings

Ambient Operating Temperature -20 °C to +70 °C
 Storage Temperature -55 °C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 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 - - - - + 70 °C -20 °C

Linear S-Parameters Data

FREQ. MHz	dB S11	Ang	dB S21	Ang	dB S12	Ang	dB S22	Ang
1800	-20.8	87.5	24.0	-68.2	-46.9	114.9	-23.1	25.4
1825	-20.4	73.4	24.1	-91.0	-46.6	94.5	-26.4	-77.5
1850	-19.8	57.0	24.3	-113.9	-47.0	72.7	-26.4	-120.6
1875	-19.0	38.3	24.4	-137.1	-46.3	61.4	-24.5	-138.3
1900	-18.1	18.6	24.5	-160.8	-45.4	42.1	-24.0	-153.9
1925	-17.2	-2.2	24.5	175.3	-45.6	13.4	-20.9	-167.2
1950	-16.4	-22.5	24.4	151.1	-45.5	-2.9	-18.9	179.3
1975	-15.7	-42.0	24.3	126.8	-45.9	-16.8	-18.0	171.1
2000	-15.0	-59.7	24.0	102.7	-46.4	-43.9	-17.3	162.0



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