

# RF AMPLIFIER

## MODEL QBH-8701

Available as: QBH-8701, Hybrid SM (E52-19422)

### Features

- High Gain: 28.0 dB Typical
- High Power: +25 dBm Typical
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	1930 - 1990 MHz	—
Gain (dB)	28.0 ±1.0	—
Gain vs. Temperature	—	—
Gain Flatness	0.9	—
Reverse Isolation (dB)	-40	—
VSWR In	1.5:1	—
VSWR Out	1.5:1	—
1 dB Compression (dBm)	+25	—
Output Intercept point 3rd Order	+37	—
2nd Order	—	—
Noise Figure (dB)	1.2	—
Power Vdc	+12	—
mA	190	—

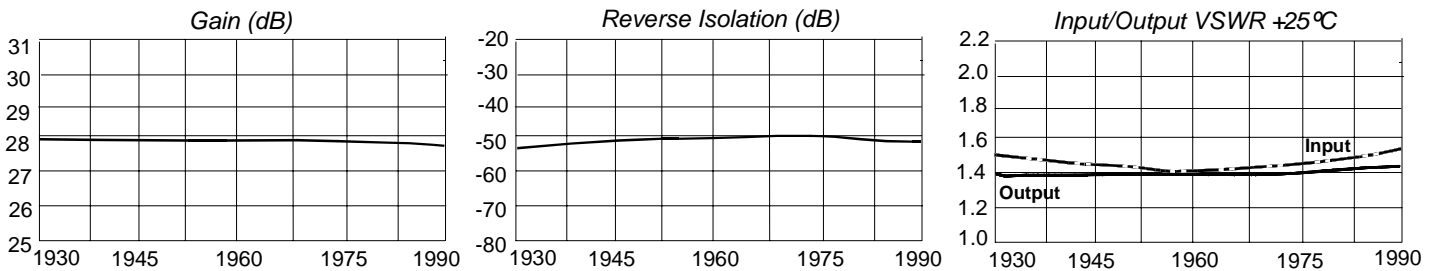
### Maximum Ratings

Ambient Operating Temperature ..... -55°C to +125 °C  
 Storage Temperature ..... -65°C to + 150 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 15.5 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
1930	-14.1 -17.8	28.1 -65.8	-59.4 -84.0	-15.4 111.5
1940	-14.2 -21.9	28.0 -68.5	-58.7 -12.7	-15.2 109.5
1950	-14.3 -27.5	27.9 -71.0	-55.3 -118.1	-15.3 107.4
1960	-14.5 -33.3	27.9 -73.7	-52.1 -93.2	-15.2 105.0
1970	-14.2 -39.6	27.8 -76.4	-51.6 -83.7	-15.2 104.7
1980	-13.9 -45.7	27.8 -79.0	-52.0 -112.5	-15.0 103.3
1990	-13.6 -53.7	27.7 -81.7	-54.4 -107.8	-14.7 103.2



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