

# RF AMPLIFIER

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

## MODEL QBH-8701

### Features

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

### Specifications

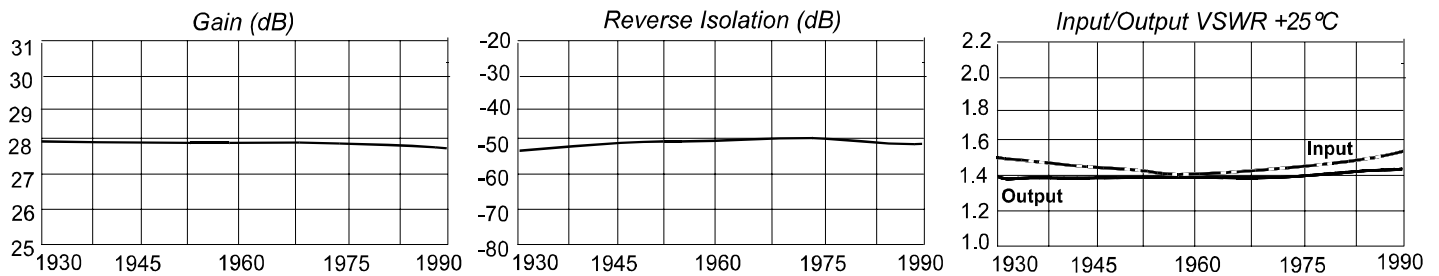
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	1930 - 1990 MHz	—
Gain (dB)	28.0 ±1.0	—
Gain vs. Temperature	—	—
Gain Flatness	0.9	—
Reverse Isolation (dB)	-40	—
VSWR In	1.5:1	—
Out	1.5:1	—
1 dB Compression (dBm)	+25	—
Output Intercept Point 3rd Order	+37	—
2nd Order	—	—
Noise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

Note: Specifications are guaranteed when tested in a 50 Ohm system.  
Specifications indicated as typical are not guaranteed.

### Absolute Maximum (No Damage) 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.)

### Typical Performance Data



Legend ——— +25 °C

### Linear S-Parameters Data

FREQ. MHz	-- S11--		-- S21--		-- S12--		-- S22--	
	dB	Ang	dB	Ang	dB	Ang	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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Rev. 6/14/10

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