RF Amplifier

Model QBH-8720

Available as

- QBH-8720
- Hybrid SM (E52-19422)

Features

- **High Gain:** 24.5 dB Typical
- **High Power:** +23 dBm Typical
- **Operating Temp.:** - 40 °C to +70 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL TA = 25°C	MIN/MAX TA = -40°C to +70°C
Frequency	824 - 849 MHz	824 - 849 MHz
Gain (dB)	24.5	--
Gain vs. Temperature	--	+2.0 Max.
Gain Flatness	0.4	0.6 Max.
Reverse Isolation (dB)	-40	-36 Min.
VSWR In Out	1.4:1 1.4:1	2.0:1 Max. 2.0:1 Max.
1 dB Compression (dBm)	+23	+21 Max.
Output Intercept Point 3rd Order 2nd Order	 +36 --	 +33 Min. -- Min.
Noise Figure (dB)	1.2	1.7 Max.
Power Vdc mA	+15 140	+15 175 Max.

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	+17 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	50 mW (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

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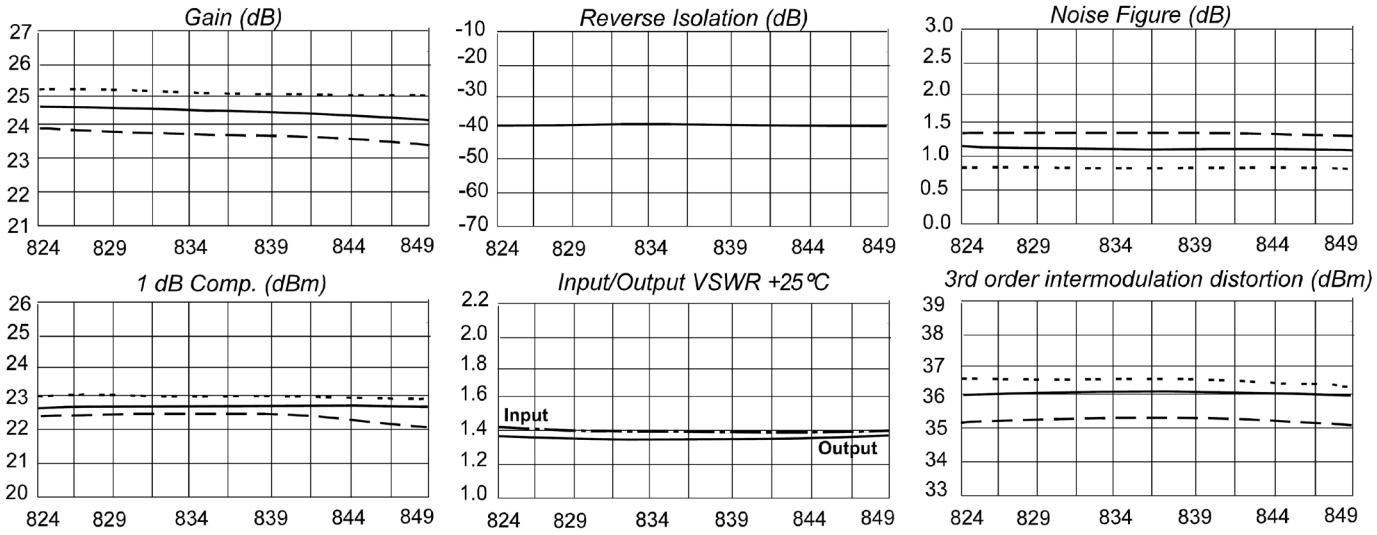
Typical Performance Data



Legend ——— *+25 ºC* – – – *+70 ºC* - - - - - - *-40 ºC*

Linear S-Parameters Data

FREQ.	S11		S21		S12		S22	
MHz	dB	Ang	dB	Ang	dB	Ang	dB	Ang
825	-15.3	136.5	24.5	165.6	-40.8	46.4	-16.8	51.0
830	-15.4	131.8	24.5	163.9	-40.6	46.8	-16.7	48.7
835	-15.5	126.4	24.4	162.2	-40.7	48.7	-16.6	46.6
840	-15.5	121.1	24.3	160.6	-40.8	47.3	-16.5	44.5
845	-15.4	115.8	24.3	158.8	-40.7	44.6	-16.4	42.4