

RF Amplifier

Model QBH-8714

Available as

- QBH-8714
- Hybrid SM (E52-19422)

Features

- **High Gain:** 16.0 dB Typical
- **High Power:** +27 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	800 - 825 MHz	800 - 825 MHz
Gain (dB)	16.0 Min.	--
Gain vs. Temperature	--	+1.5 Max.
Gain Flatness	0.3	0.6 Max.
Reverse Isolation (dB)	-21	-19 Min.
VSWR	In 15:1 Out 1.6:1	2.0:1 Max. 2.0:1 Max.
1 dB Compression (dBm)	+27	+26 Min.
Output Intercept Point		
3rd Order	+41	+38 Min.
2nd Order	--	--
Noise Figure (dB)	1.1	1.5 Max.
Power	Vdc +15 mA 150	+15 170 Max.

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

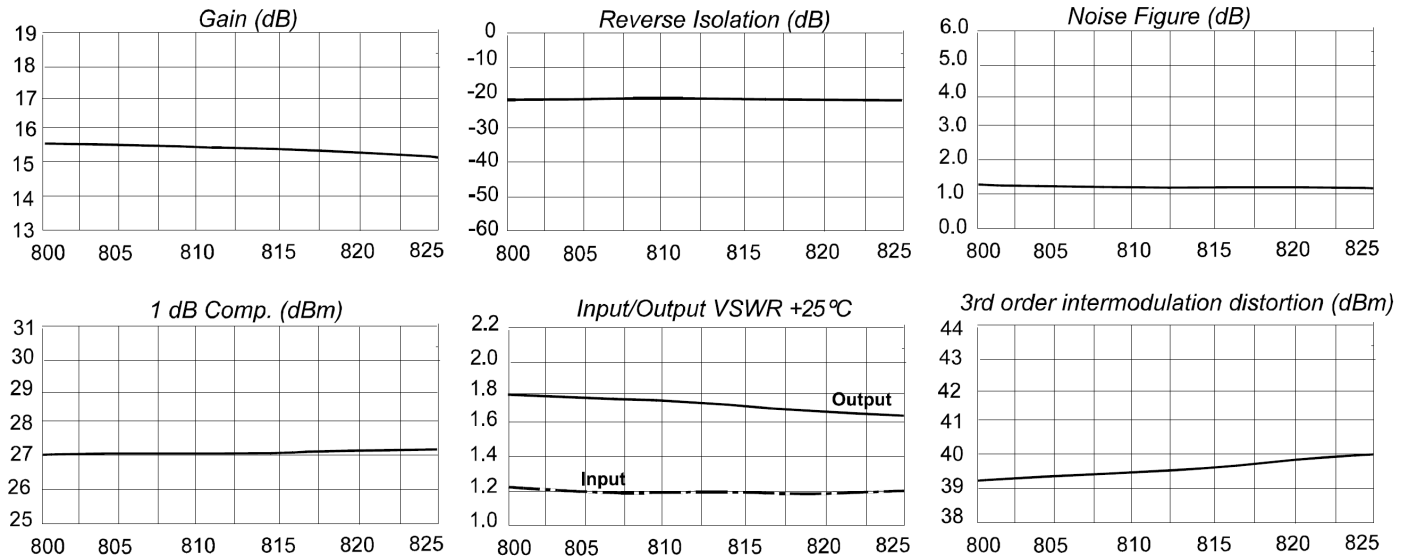
Absolute Maximum Ratings

Ambient Operating Temperature	-55°C to +125°C
Storage Temperature	-65°C to +150°C
Case Temperature	+125°C
DC Voltage	+20 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 °C

Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
800	-21.0	-8.4	15.4	-35.5	-20.5	-45.9	-11.1	-74.6
805	-21.7	-22.3	15.4	-37.9	-20.4	-47.3	-11.2	-78.4
810	-21.6	-32.8	15.3	-40.3	-20.3	-49.6	-11.4	-82.7
815	-21.2	-41.4	15.3	-42.7	-20.3	-51.6	-11.6	-86.9
820	-20.8	-48.5	15.2	-45.1	-20.2	-53.5	-11.9	-91.2
825	-20.7	-54.1	15.2	-47.5	-20.2	-55.4	-12.1	-95.5