

QBH-9076 Amplifier



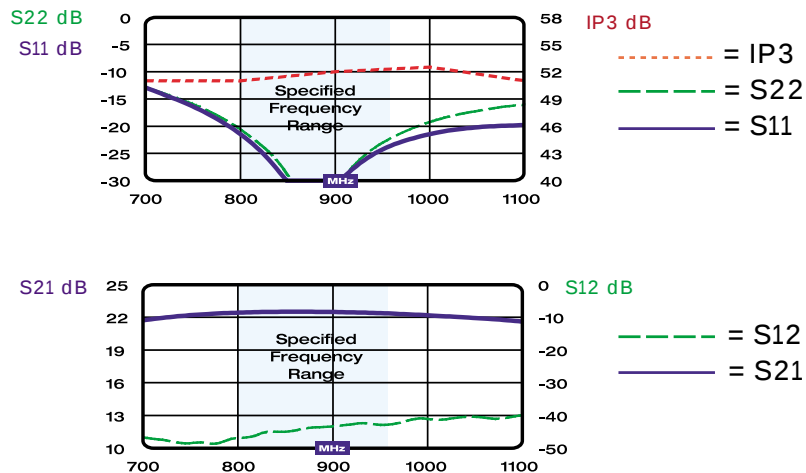
The QBH-9076 is designed for the 800 MHz to 960 MHz frequency range. The unit uses miniature hybrid couplers on the input and output to combine the performance of a pair of cascode GaAs FET amplifiers and to maintain excellent input and output VSWR.

FEATURES

- 800–960 MHz
- 2.5 dB typical noise figure is ideal for a second stage in a high dynamic receiver
- +50 dBm typical third order intercept is ideal for a base station PA driver
- Remarkably stable over temperature
- Low VSWR

PACKAGING

- Die heat spreaders are directly attached to the copper heat spreader for maximum heat dissipation
- Efficient thermal design



TYPICAL S-PARAMETER DATA

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
800	-20.41	64.7	22.8	1.9	-45.7	-38.4	-23.0	96.3
830	-24.71	42.5	22.8	-15.4	-45.5	-48.5	-30.9	77.6
850	-28.71	25.0	22.7	-26.7	-43.8	-54.3	-34.9	57.8
870	-34.0	85.4	22.6	-37.8	-43.2	-58.2	-32.0	18.7
890	-34.5	16.9	22.5	-48.6	-41.4	-50.9	-29.4	-52.5
910	-30.0	-28.0	22.4	-59.4	-42.5	-74.2	-26.0	-87.8
930	-26.8	-49.3	22.3	-69.9	-43.1	-74.3	-23.0	-105.6
950	-24.4	-62.9	22.2	-80.3	-41.6	-78.8	-21.2	-118.1
960	-23.6	-68.4	22.1	-85.4	-41.4	-81.4	-20.5	-124.5



The Total Microwave Solution

QBH-9076 Amplifier

Electrical

Characteristics

Specification

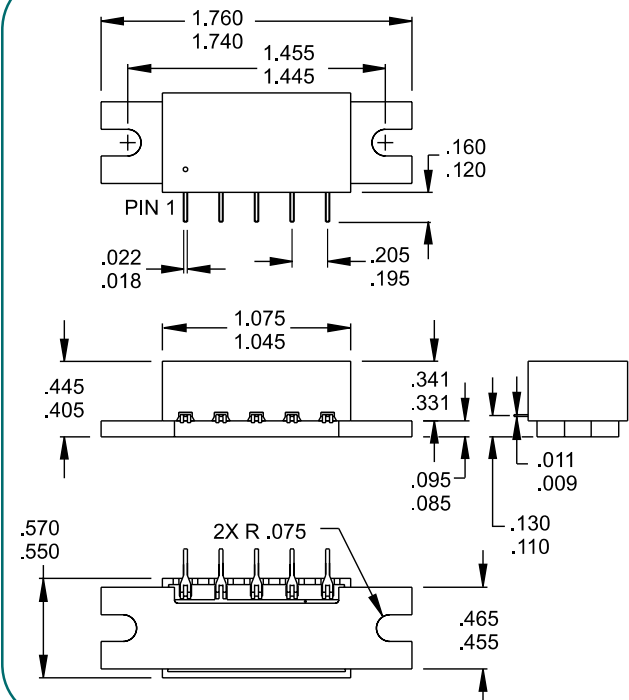
Operating Band	800 – 960 MHz
Gain	22.0 ± 1.0 dB
Gain Flatness	1.0 dB max
Noise Figure	3.0 dB max
Third OIP	+49 dBm min
VSWR Input	1.5:1 max
VSWR Output	1.5:1 max
P1dB	+32.0 dBm min
DC Power	15 Vdc – 450 mA typ
Temperature	–40 to +70°C

Absolute Maximum Ratings

Specification

Power Supply Voltage:	
Sustaining	+18.0 Vdc
Pulse (transient)	+20.0 Vdc
Temperature:	
Operating	–40 to +100°C
Storage	–50 to +150°C
Maximum Input Drive	2.0 Vrms
Thermal Rise, junction-to-case	+34°C

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