

RF AMPLIFIER

Available as: QBH-5128, F-Pack (E52-18563)

MODEL QBH-5128

Features

- High Gain: 25.5 dB Typical
- High Power: +13 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 1200 MHz	20 - 1200 MHz
Gain (dB)	25.5 ± 0.5	—
Gain vs. Temperature	—	+1.0/-1.0 Max.
Gain Flatness	1.0	1.0 Max.
Reverse Isolation (dB)	-28	-28 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+13	+13 Min.
Output Intercept point		
3rd Order	+28	+27 Min.
2nd Order	+41	+38 Min.
Noise Figure (dB)	4.5	5.0 Max.
Power Vdc	+15	+15
mA	70	70 Max.

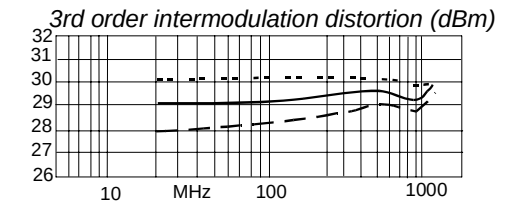
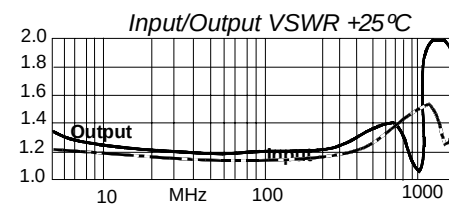
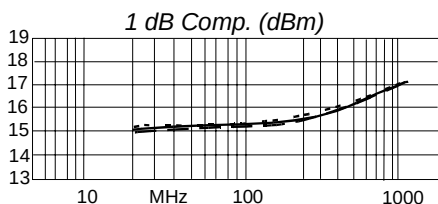
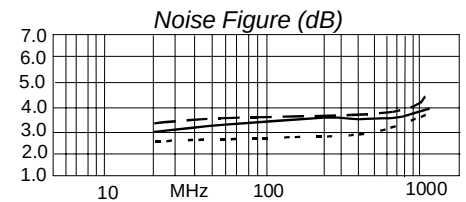
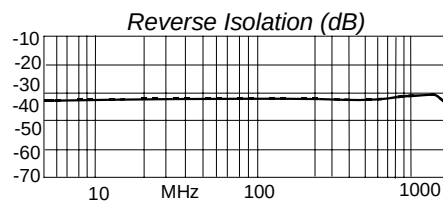
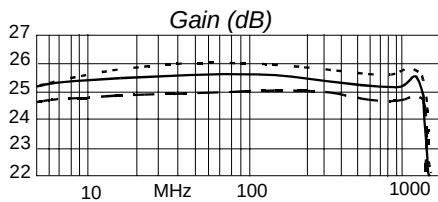
Maximum Ratings

Ambient Operating Temperature -55°C to +100 °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 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 --- + 85 °C -55 °C

Linear S-Parameters Data

FREQ. MHz	S11-- dB	S11-- Ang	S21-- dB	S21-- Ang	S12-- dB	S12-- Ang	S22-- dB	S22-- Ang
20	-23.4	-178.4	25.5	-1.5	-34.0	2.5	-20.2	174.0
60	-23.7	163.4	25.6	-18.0	-33.9	-5.9	-20.8	166.5
80	-23.7	156.7	25.6	-25.0	-33.9	-9.3	-20.9	163.1
100	-23.6	149.9	25.6	-31.9	-33.9	-11.2	-20.9	159.2
400	-20.3	82.5	25.4	-131.7	-33.4	-54.8	-17.1	100.4
600	-18.5	59.3	25.3	161.5	-32.8	-83.2	-15.5	52.9
800	-16.9	39.3	25.2	93.6	-32.6	-118.4	-16.4	4.9
1000	-15.0	21.3	25.4	21.8	-32.2	-153.2	-28.4	-32.3
1200	-13.8	-18.6	25.4	-59.6	-32.0	169.1	-12.2	41.8



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