RF AMPLIFIER MODEL QBH-2003

Available as: QBH-2003, 0.500" Sq. Surface Mount (E52-Gen2SMT)

Features

- High Output Power: +19 dBm Typical
- Low Noise Figure: 1 dB Typical
- High Gain: 20 dB
- Lower Cost Packaging

Specifications

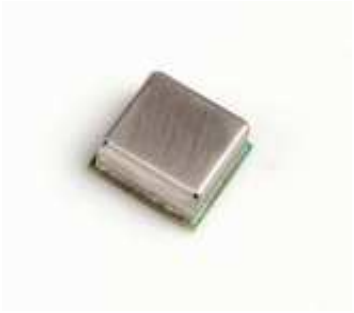
CHARACTERISTIC		TYPICAL Ta= 25 ºC	Min / Max
Frequency		800 - 960 MHz	800 - 960 MHz
Gain (dB)		20 dB	20 dB Min.
Gain Flatness		+/-0.5 dB	+/-0.5 dB
VSWR	In	1.5:1	-
	Out	1.5:1	-
1 dB Compression (dBm)		+19 dBm	+18 dBm (Min)
Output Intercept Point			
	3rd Order	+31 dBm	+30 dBm (Min)
	2nd Order	+40 dBm	-
Noise Figure (dB)		1.0 dB	-
Power	Vdc	5	5
	mA	66	66

Revision 9-3-2013

Maximum (No Damage) Ratings

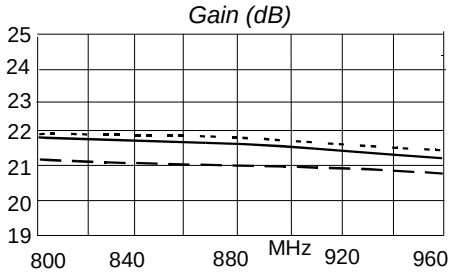
Ambient Operating Temperature ..... -40ºC to + 85 ºC
Storage Temperature ..... -65ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 8 Volts
Continuous RF Input Power ..... + 13 dBm
Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

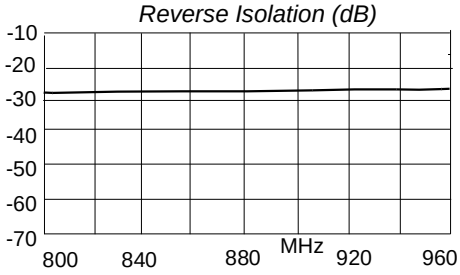
Note: Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

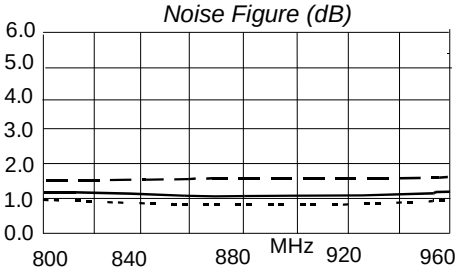


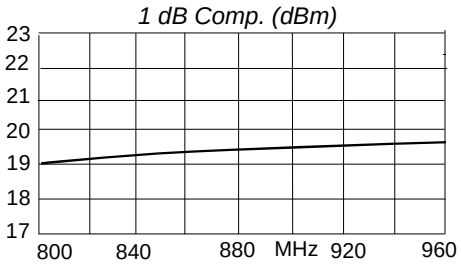
Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-40 ºC*

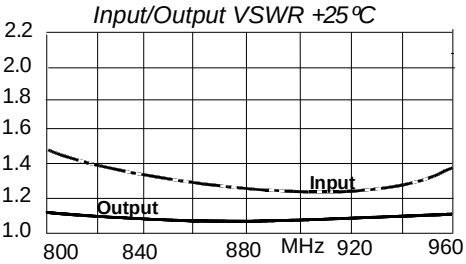
Typical Performance Data

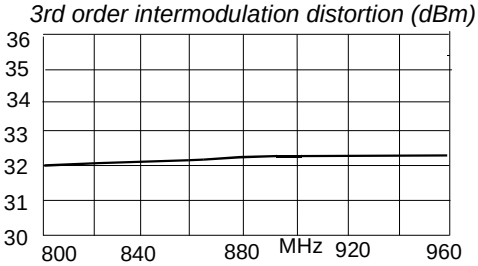












Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 Ang
800	-14.7	130.0	21.7	21.2	-26.7	-92.2	-24.7	-89.0
830	-16.1	115.6	21.7	12.7	-26.6	-98.5	-26.3	-109.5
850	-17.2	103.0	21.6	7.0	-26.5	-103.0	-27.5	-123.5
870	-18.2	86.6	21.6	1.3	-26.4	-106.7	-28.1	-137.7
890	-19.0	64.2	21.5	-4.5	-26.4	-11.4	-27.9	-153.0
910	-19.2	36.1	21.4	-10.3	-26.4	-115.0	-26.9	-167.7
930	-18.6	7.7	21.4	-16.1	-26.4	-119.7	-25.8	177.8
950	-17.2	-15.4	21.3	-21.9	-26.5	-124.1	-24.6	164.7
960	-16.6	-24.5	21.2	-24.8	-26.4	-126.4	-24.0	158.0

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