

RF AMPLIFIER

Available as: QBH-5695PM, 4 Pin .450" Sq. Surface Mount (SM3)

MODEL QBH-5695PM

Features

- Superior Phase Noise Performance
- Operating Temp. -40 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +85 °C
Frequency	10 - 640 MHz	10 - 640 MHz
Gain (dB)	13.0	12.0 Min./14.0 Max.
Power @ 1 dB Comp. (dBm)	27.0	26.0 Min. *
Reverse Isolation (dB)	17	15 Min.
VSWR In	1.3:1	2.0:1 Max.
Out	1.6:1	2.0:1 Max.
Noise Figure (dB)	6.0	8.0 Max.
Power Vdc	+15	+15
mA	180	195 Max.

Notes: Care should always be taken to effectively ground the case of each unit. Parameters are measured in a 50 Ohm system @ the nominal DC supply voltage. *25.0 dBm Min. @ 640 MHz.

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +54 dBm
 Second Order Two Tone Intercept Point +49 dBm
 Third Order Two Tone Intercept Point +42 dBm

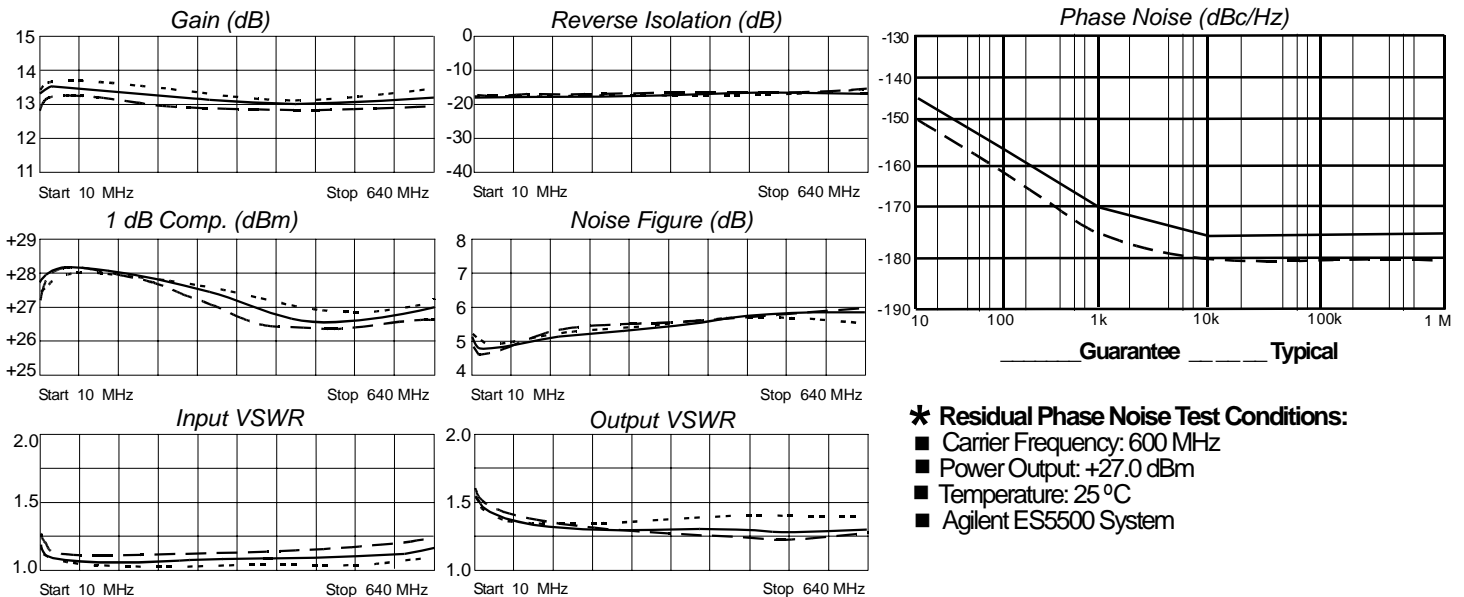
Absolute Maximum Ratings

Operating Temperature -55°C to +125 °C
 Storage Temperature -62°C to +125 °C
 DC Voltage @ +25 °C +17 Volts
 Continuous RF Input Power +16 dBm
 Junction Temperature of RF Xsistor +200 °C
 Junction to Case Temperature Rise (TjC) +45 °C

Guaranteed Phase Noise Performance (dBc/Hz)

Frequency	Typical	Guarantee
10 Hz	-160	-145
100 Hz	-165	-155
1 kHz	-175	-170
10 kHz	-180	-175
100 kHz	-182	-175
1 MHz	-182	-175

Typical Performance Data



* Residual Phase Noise Test Conditions:

- Carrier Frequency: 600 MHz
- Power Output: +27.0 dBm
- Temperature: 25 °C
- Agilent ES5500 System

Legend ——— +25 °C - - - - +85 °C ······ -40 °C



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