



HA1002

General Description

The HA1002 is a low noise amplifier for general purpose applications.

The high gain, low noise figure and high output power makes this devices an ideal choice for an input stage amplifier in the frequency range from 1.1GHz to 1.7GHz.

The device operates from -40°C to $+85^{\circ}\text{C}$ with a low power consumption of 1.2W.

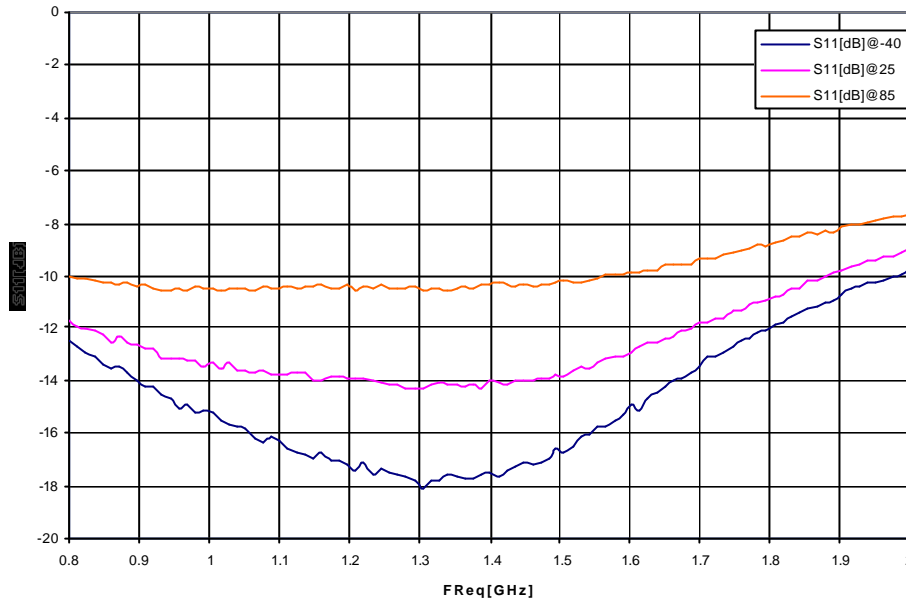
Electrical Performance

Typical Data @25 °C

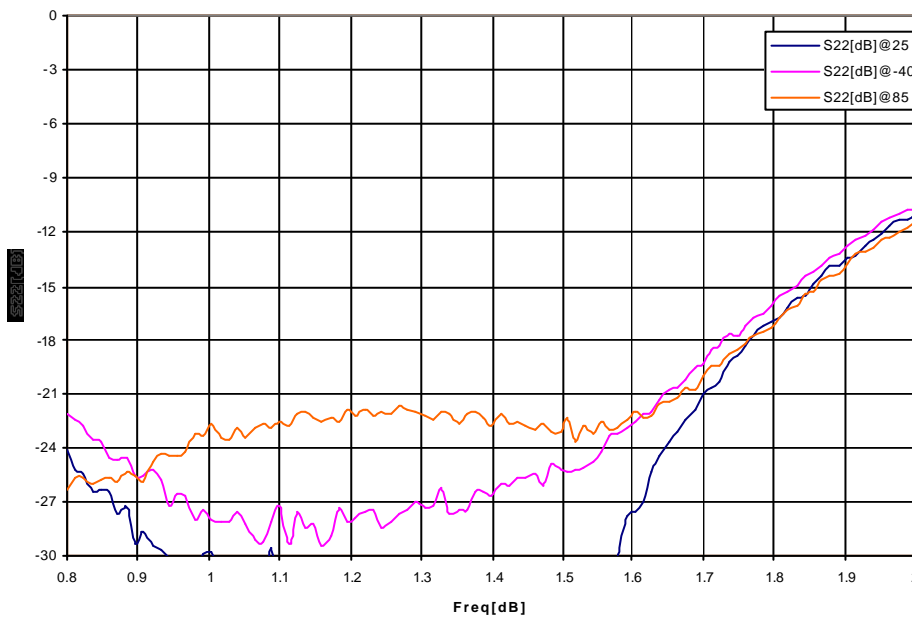
Parameter	Min	Typ	Max	Units
Frequency Range	1.1		1.7	GHz
Gain	27.0	29.0		dB
Gain Flatness		± 0.5	± 0.7	dB
Noise Figure@-40°C		1.5	1.8	dB
Noise Figure@+25°C		1.6	1.9	dB
Noise Figure@+85°C		1.9	2.0	dB
Power Output@P _{1dB}	15.0	19.0		dBm
Input VSWR@-40°C		1.6:1	2.0:1	
Input VSWR@+25°C		1.8:1	2.0:1	
Input VSWR@+85°C		2.0:1	2.1:1	
Output VSWR		1.4:1	1.5:1	
Temperature Range	-40		+85	°C
DC Voltage	8.0		12.0	V
DC Current			150.0	mA
Package	M101			
Size	55 x 32 x 11			mm

Rev. 1.0

Input Reflection vs. Temperature and Frequency

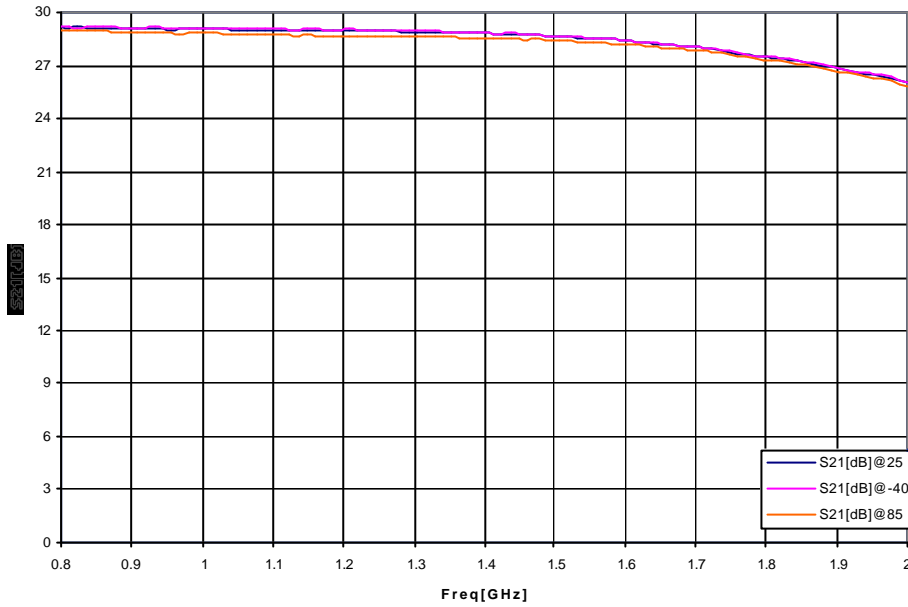


Output Reflection vs. Temperature and Frequency



Gain vs. Temperature and Frequency

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Noise Figure

