

Sonoma Instrument®

Model 321 Amplifier



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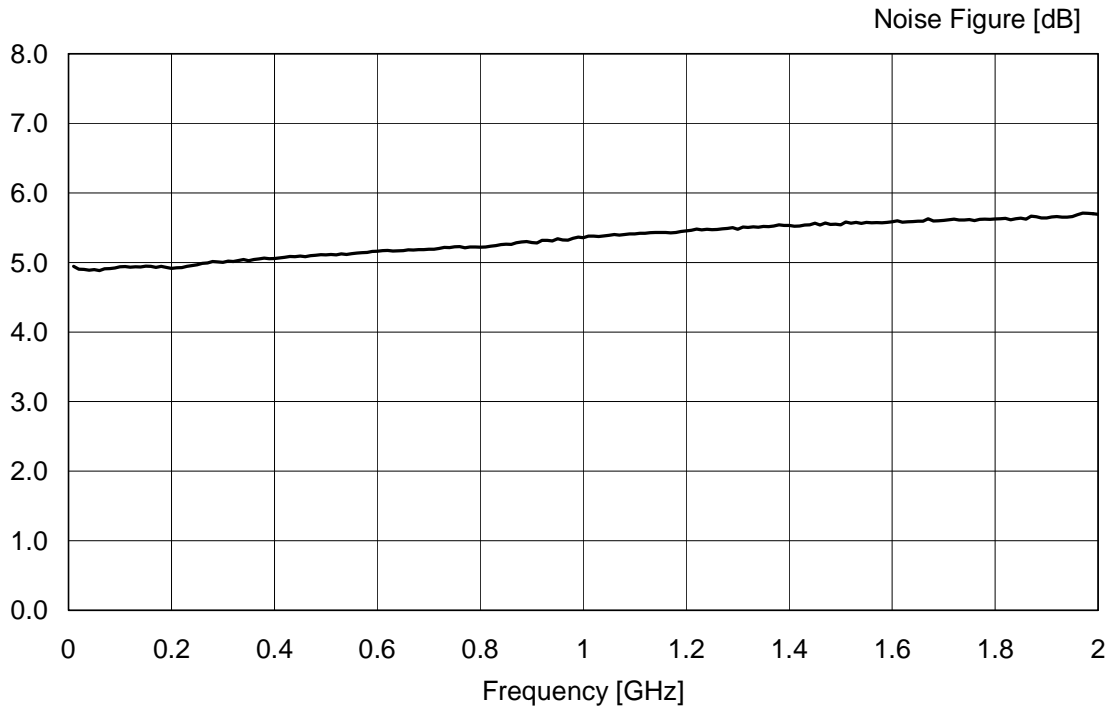
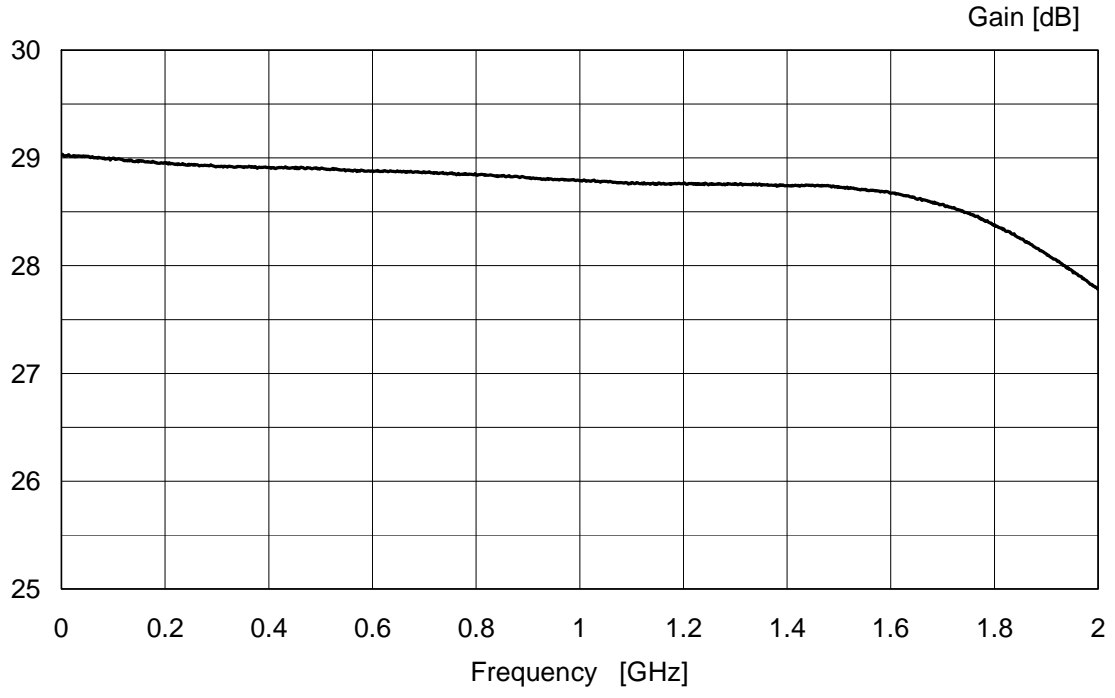
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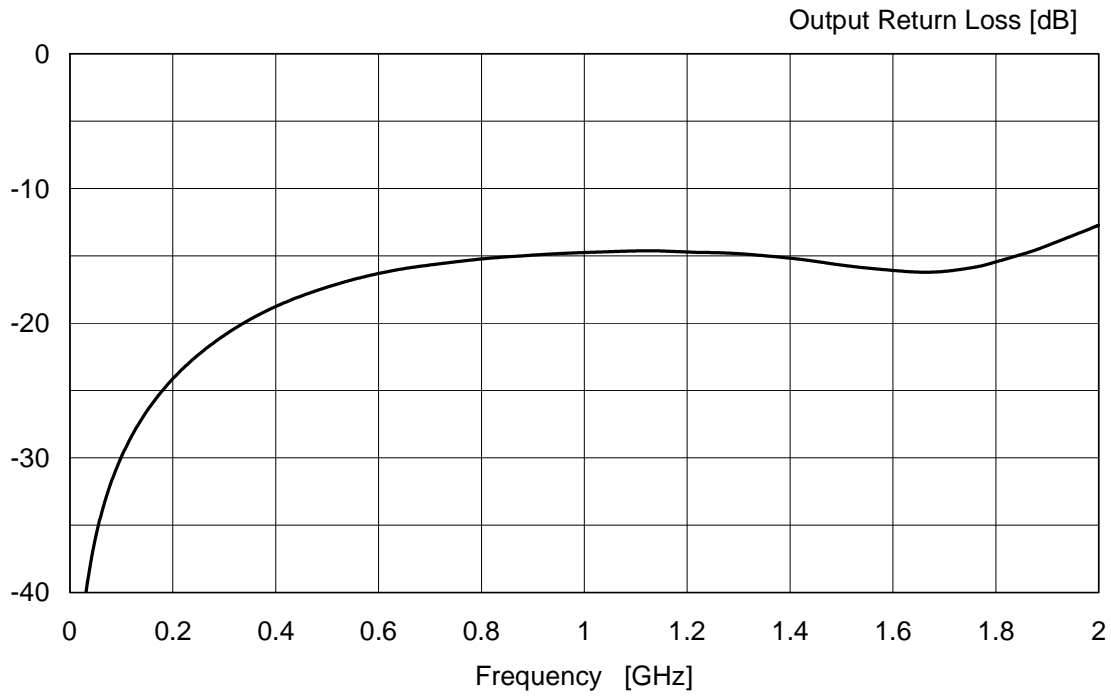
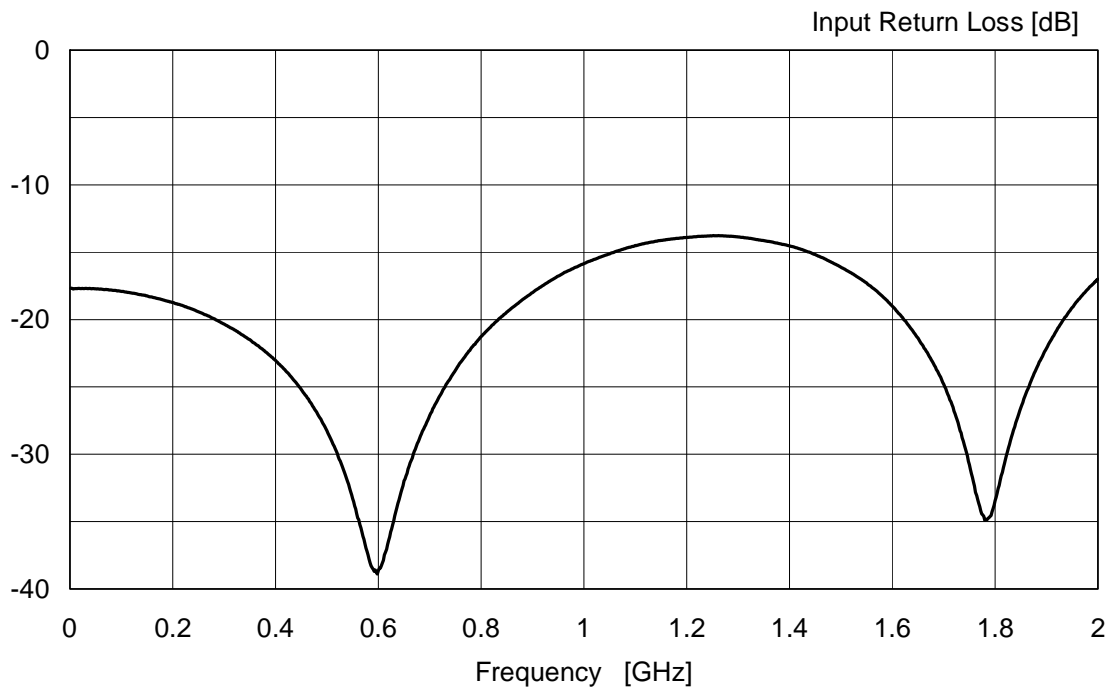
Specifications

321 Broadband Amplifier

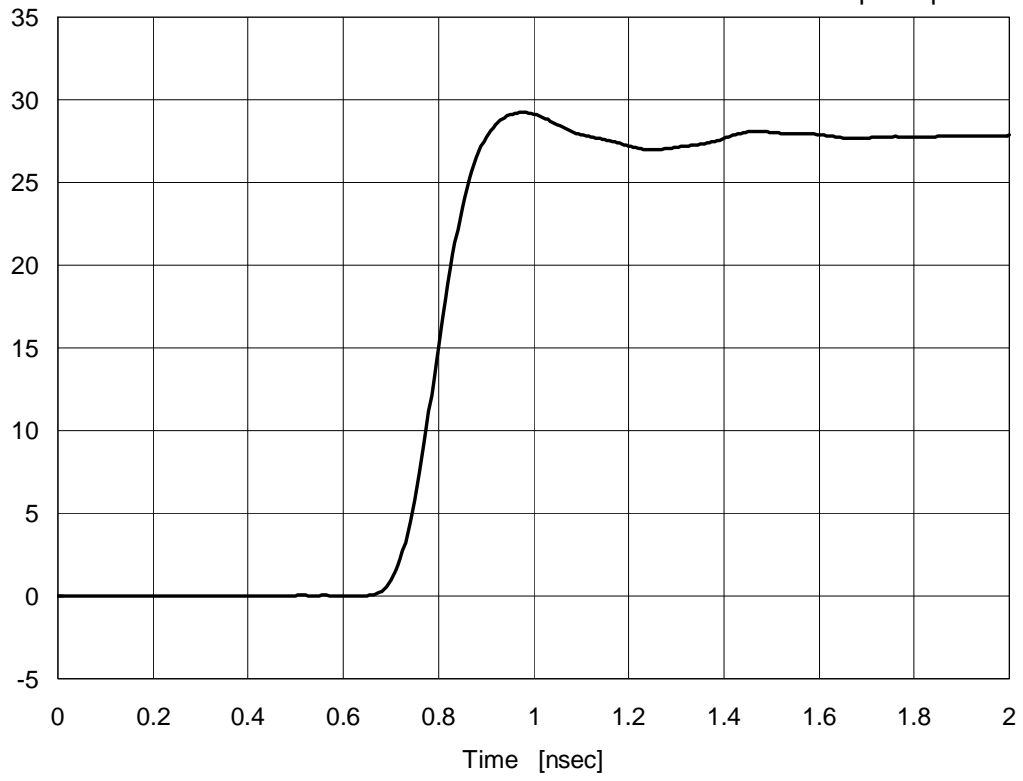
Bandwidth	9 kHz - 2 GHz	- 3 dB at 1 GHz
Gain	28.5 ± 1.5 dB approx. 27 x	non-inverting, 50 Ω load 100 kHz - 1.6 GHz
Gain Flatness	1.0 dB	
Noise Figure	6.5 dB	10 MHz - 2 GHz
Equivalent Input Noise Voltage *	0.95 nV / √ Hz	10 MHz - 2 GHz * Incl. 0.45 nV / √ Hz from a 50 Ω source
Output at 1dB Gain Compression	+20 dBm / 100 mW +17 dBm / 50 mW +18 dBm / 63 mW	100 kHz - 1.8 GHz 1.8 - 2 GHz typical, at 2 GHz
Maximum Input for Linear Operation	approx. - 8.5 dBm	84 mV r.m.s.
Harmonic Distortion	- 30 dBc	typical, at +20 dBm output
Third Order Intercept Point	+ 33 dBm	typical
Impedance	50 Ω	a.c. coupled
Input Return Loss	10 dB	100 kHz - 2 GHz
Output Return Loss	10 dB	100 kHz - 2 GHz
Reverse Isolation	40 dB	typical, 100 kHz - 2 GHz
Transition Time	140 psec	typical
Group Delay	790 ± 50 psec	typical, 1 MHz - 2 GHz

Input Damage Level:	+10 dBm ± 1V
Connectors:	Type N (f)
Temperature Range:	Operating 0 to + 45 °C Non-Operating - 25 to + 70 °C
Altitude:	15,240 ft / 5000 m
Humidity:	20 - 60 % RH, Operating
Power Requirements:	100, 120, 220, or 240 V a.c. 50 - 60 Hz, 20 VA Power cord according to IEC 60320, C13
Size:	3.6 × 4.3 × 7.2" (H × W × D) 91 × 109 × 183 mm
Net Weight:	3.3 lb / 1.5 kg

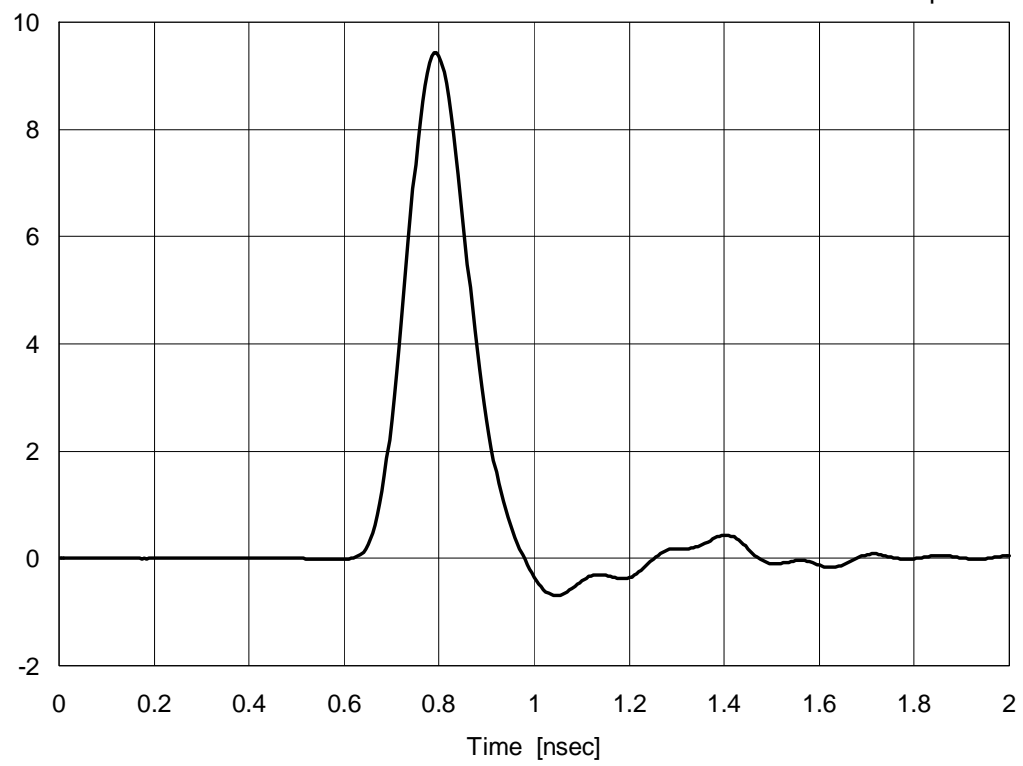




Step Response



Pulse Response



Dimensions
inch [mm]

