

Specifications

305-1054 Broadband Amplifier

Bandwidth	10 kHz - 3 GHz	- 3 dB at 1 GHz
Gain	19 ± 1 dB 9 V / V	inverting, 50 Ω load
Gain Flatness	± 0.5 dB	500 kHz - 2 GHz
Noise Figure	4.8 dB	10 MHz - 2 GHz
Equivalent Input Noise Voltage	0.78 nV / √ Hz	including 0.45 nV / √ Hz from a 50 Ω source
Output at 1dB Gain Compression	+15 dBm	3.5 Vp-p, 10 MHz - 2.5 GHz
Maximum Input for Linear Operation	approx. ± 190 mV	
Harmonic Distortion	- 55 dB	0 dBm out, 10 MHz - 1.5 GHz
Third Order Intercept Point	+ 28 dBm	at 300 MHz
Impedance	50 Ω	a.c. coupled
Input Return Loss	15 dB	10 MHz - 3 GHz
Output Return Loss	12 dB	10 MHz - 3 GHz
Reverse Isolation	22 dB	10 MHz - 3 GHz
Rise Time	110 psec	
Group Delay Variation	± 30 psec	45 MHz - 3 GHz

Connectors: Type N

Input Damage Level:
 D.C. ± 1V
 R.F. 0 dBm
 Pulse ± 500 mV

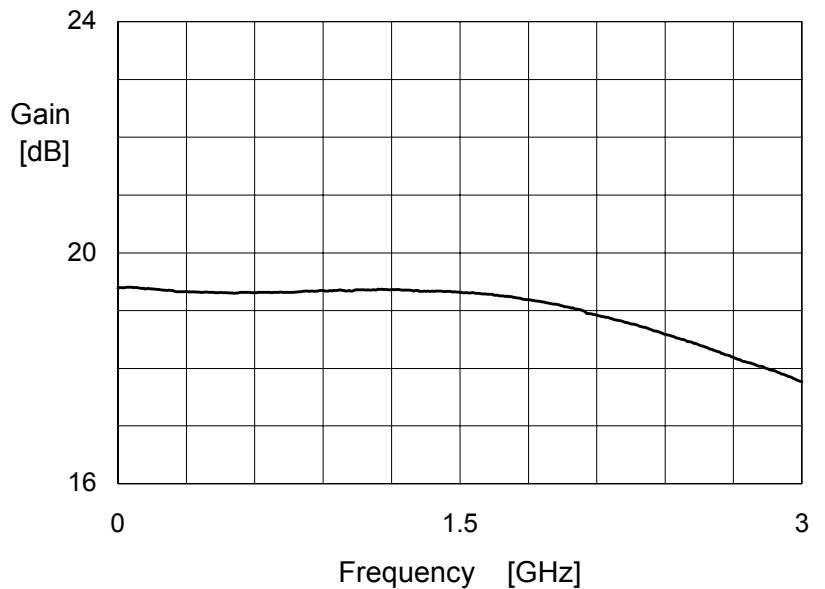
Temperature Range:
 Operating: 0 to + 55 °C
 Storage: - 25 to + 75 °C

Power Requirements:
 115 / 230 V AC, ± 10%
 50 - 60 Hz, 11 VA

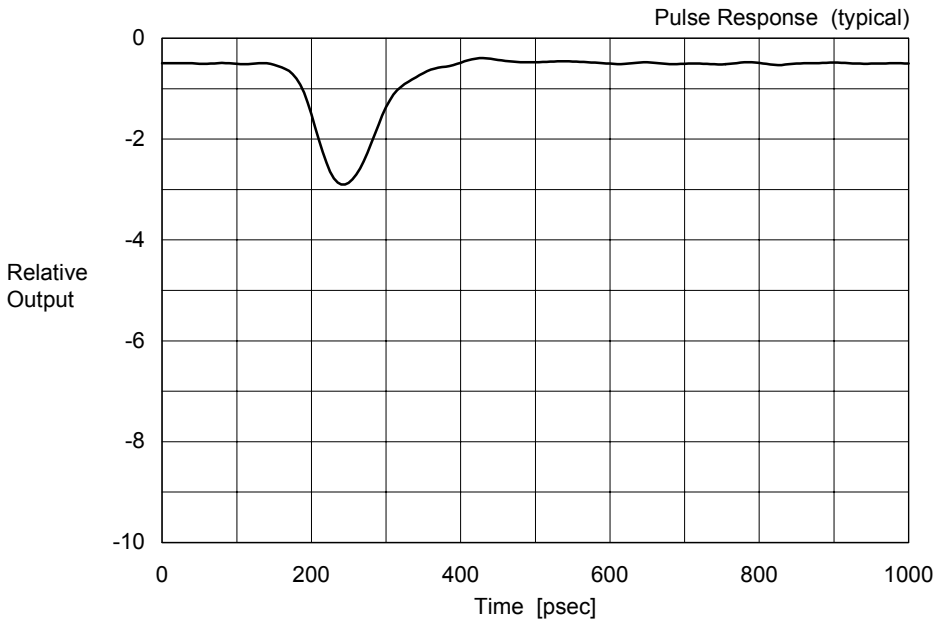
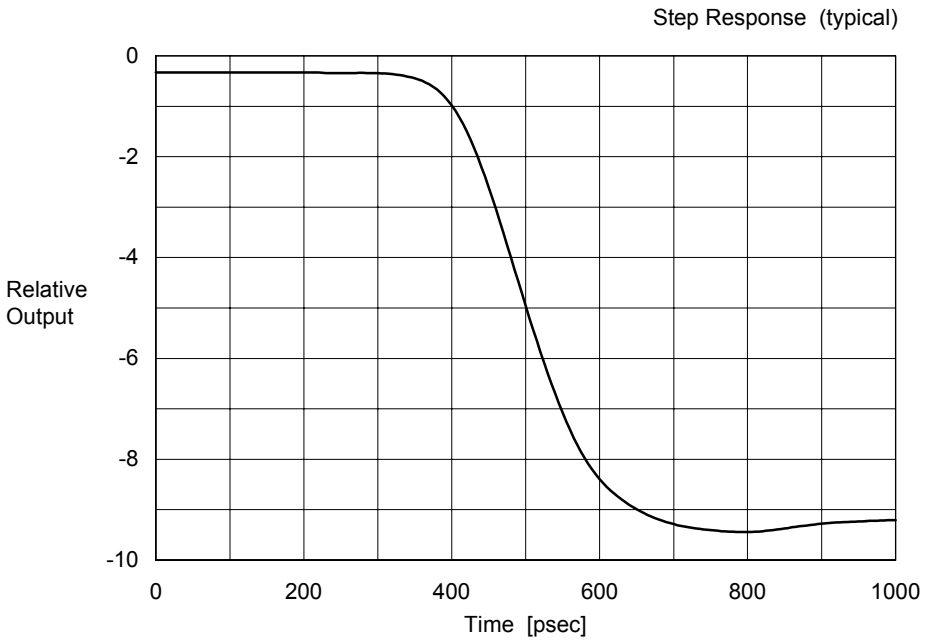
Size: 3.6 × 4.3 × 7.2" (H × W × D)
 91 × 109 × 183 mm

Net Weight: 3.3 lb / 1.5 kg

Frequency Response (Typical)



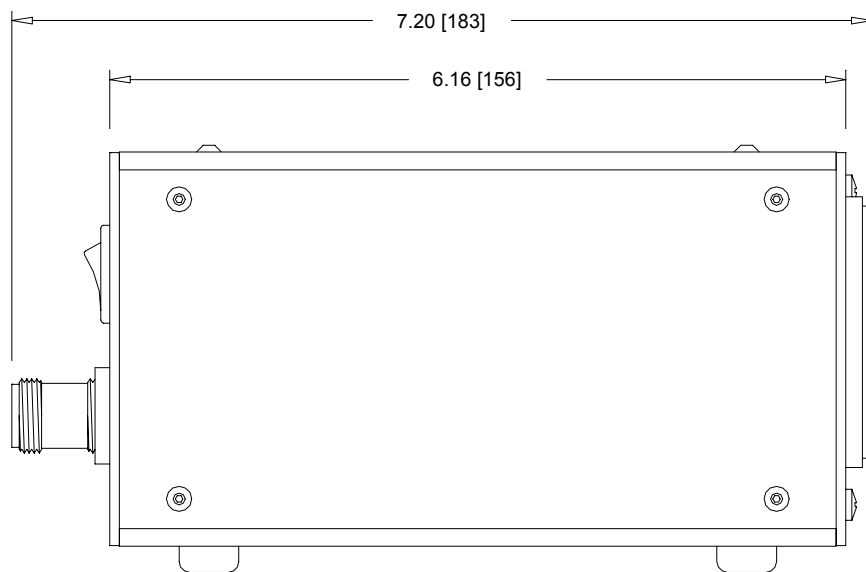
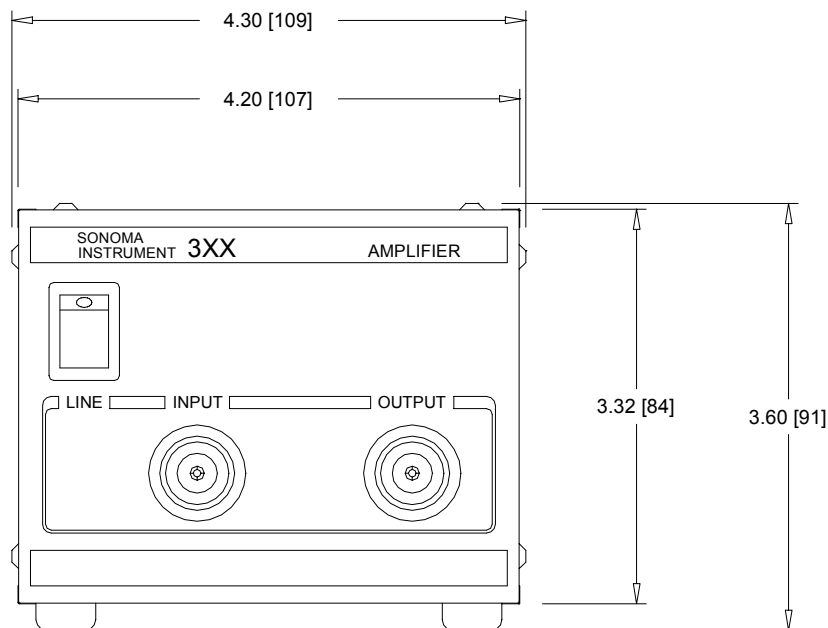
DATA SUBJECT TO CHANGE



DATA SUBJECT TO CHANGE

Outline Drawing

inch [mm]



DATA SUBJECT TO CHANGE

**SONOMA
INSTRUMENT**

P.O. Box 9011, Santa Rosa, California 95405

Tel. 707-542-8569

Fax. 707-542-1551

July 2004 © Sonoma Instrument Co.

www.sonoma-instrument.com