

Datasheet

HVA-10M-60-F

10 MHz High Input Impedance Voltage Amplifier



Features

- Switchable Gain 40/60 dB (x100 / x1,000)
- Bandwidth DC ... 10 MHz
- High Input Impedance 1 MΩ
- Switchable AC/DC Coupling

Applications

- Oscilloscope and Transient Recorder Preamplifier
- Photomultiplier and Microchannel Plate Amplifier
- Signal Booster for Optical Receivers and Current Amplifiers
- Time-Resolved Pulse and Transient Measurements

Specifications

Test Conditions	$V_s = \pm 15 \text{ V}$, $T_a = 25^\circ\text{C}$
Gain	Gain 40/60 dB switchable (@ 50 Ω load)
Gain Accuracy	$\pm 0.2 \text{ dB}$
Frequency Response	Lower Cut-Off Frequency (-3 dB) DC/1 Hz switchable
	Upper Cut-Off Frequency (-3 dB) 10 MHz
	Rise/Fall Time (10% - 90%) 35 ns
Input	Input Impedance 1 MΩ 15 pF
	Input Voltage Noise 4.7 nV/ $\sqrt{\text{Hz}}$ (@ 2 MHz)
	Integrated Input Noise 100 μV peak-peak
	Input Bias Current 2 pA
	Input Offset Voltage 250 μV max.
	Input Voltage Drift 2 μV/ $^\circ\text{C}$
Output	Output Impedance 50 Ω (terminate with 50 Ω load for best performance)
	Output Voltage $\pm 3.5 \text{ V}$ (@ 50 Ω load, for linear amplification)
	Max. Output Current 100 mA
	Output Offset Trimmer Range $\pm 500 \text{ mV}$
	Slew Rate 500 V/μs (@ 50 Ω load)
Power Supply	Supply Voltage $\pm 15 \text{ V}$
	Supply Current $\pm 70 \text{ mA typ.}$ (depends on operating conditions, recommended power supply capability min. $\pm 150 \text{ mA}$)
Case	Weight 200 g (0.5 lbs)
	Material AlMg4.5Mn, nickel-plated

SOPHISTICATED TOOLS FOR SIGNAL RECOVERY

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DE-HVA-10M-60-F_R5/JM/25FEB2019

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Specifications (continued)

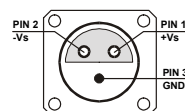
Temperature Range	Storage Temperature	- 40 ... + 100 °C
	Operating Temperature	0 ... + 60 °C

Absolute Maximum Ratings

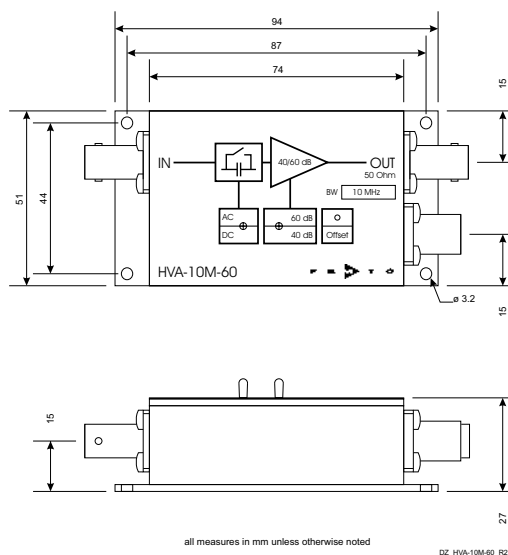
Power Supply Voltage	± 20 V
Signal Input Voltage	± 5 V
Transient Input Voltage	200 V (out of a 200 pF Source)

Connectors

Input	BNC
Output	BNC
Power Supply	LEMO series 1S, 3-pin fixed socket
	Pin 1: + 15V
	Pin 2: - 15V
	Pin 3: GND



Dimensions



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