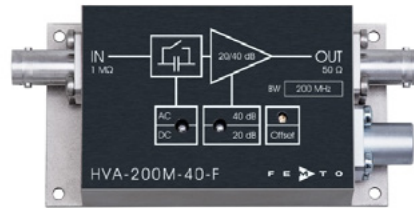


Datasheet

HVA-200M-40-F

200 MHz High Input Impedance
Voltage Amplifier



Features

- **Switchable Gain 20/40 dB (x10 / x100)**
- **Bandwidth DC ... 200 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	20/40 dB switchable
	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)	200 MHz
	Rise/Fall Time (10% - 90%)	1.8 ns
Input	Input Impedance	1 MΩ 15 pF
	Input Voltage Noise	4.5 nV/ $\sqrt{\text{Hz}}$ (@ 50 MHz, 40 dB gain)
		5.5 nV/ $\sqrt{\text{Hz}}$ (@ 50 MHz, 20 dB gain)
	Integrated Input Noise	450 μV peak-peak (@ 40 dB gain)
		600 μV peak-peak (@ 20 dB gain)
	Input Bias Current	10 pA
Input Offset Voltage	500 μV typ.	
Input Voltage Drift	5 $\mu\text{V}/^\circ\text{C}$	
Output	Output Impedance	50 Ω (terminate with 50 Ω load for best performance)
	Output Voltage	$\pm 1\text{ V}$ (@ 50 Ω load, for linear amplification)
	Max. Output Current	60 mA
	Output Offset Trimmer Range	$\pm 100\text{ mV}$
	Slew Rate	600 V/ μs (@ 20 dB, 50 Ω load) 1,100 V/ μs (@ 40 dB, 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



HVA-200M-40-F_R5/JM/25FEB2019

Datasheet

HVA-200M-40-F

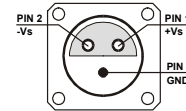
**200 MHz High Input Impedance
Voltage Amplifier**

Specifications (continued)

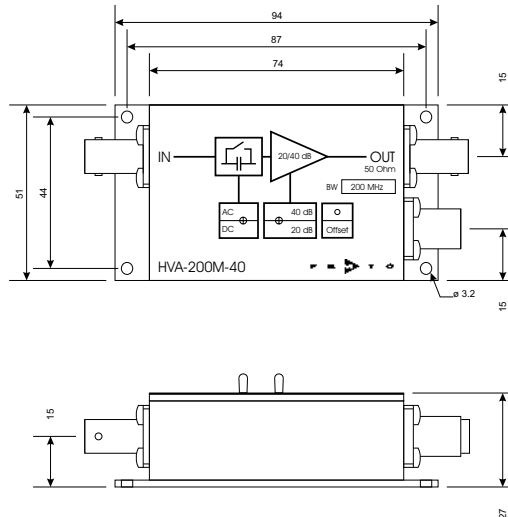
Temperature Range	Storage Temperature	- 40 ... + 100 °C
	Operating Temperature	0 ... + 60 °C

Absolute Maximum Ratings	Power Supply Voltage	± 20 V
	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



all measures in mm unless otherwise noted

DZ_HVA-200M-40_R2

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SOPHISTICATED TOOLS FOR SIGNAL RECOVERY

