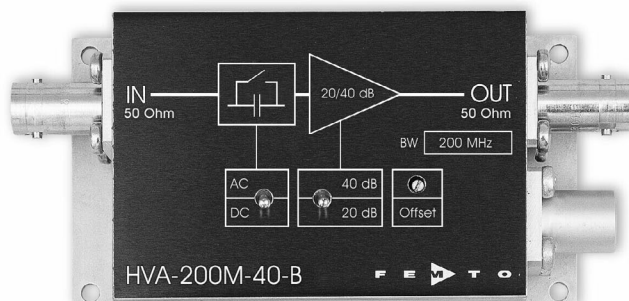




Datasheet

HVA-200M-40-B

200 MHz Low-Noise Voltage Amplifier



Features

- **Switchable Gain 20/40 dB (x10 / x100)**
- **Bandwidth DC ... 200 MHz**
- **Low Input Noise of 1.2 nV/√Hz**
- **Switchable AC/DC Coupling**

Applications

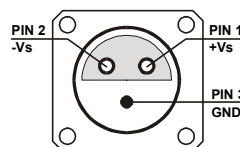
- **Oscilloscope and Transient Recorder Preamplifier**
- **Photomultiplier and Microchannel Plate Amplifier**
- **Signal Booster for Optical Receivers and Current Amplifiers**
- **Time-Resolved Pulse and Transient Measurements**

Specifications

	<i>Test Conditions</i>	<i>Vs = ± 15 V, Ta = 25°C</i>
Gain	Gain	20/40 dB switchable
	Gain Accuracy	± 0.2 dB
Frequency Response	Lower Cut-Off Frequency (-3 dB)	DC/1 kHz switchable
	Upper Cut-Off Frequency (-3 dB)	200 MHz
	Rise/Fall Time (10% - 90%)	1.8 ns
Input	Input Impedance	50 Ω 12 pF
	Input Voltage Noise	1.2 nV/√Hz (@ 50 MHz, 40 dB gain) 3.5 nV/√Hz (@ 50 MHz, 20 dB gain)
	Integrated Input Noise	150 μV peak-peak (@ 40 dB gain) 400 μV peak-peak (@ 20 dB gain)
	Input Bias Current	20 μA
	Input Offset Voltage	500 μV typ.
	Input Voltage Drift	1 μV/°C
Output	Output Impedance	50 Ω (terminate with 50 Ω load for best performance)
	Output Voltage	± 1 V (@ 50 Ω load, for linear amplification)
	Max. Output Current	60 mA
	Output Offset Trimmer Range	± 100 mV
	Slew Rate	500 V/μs (@ 20 dB, 50 Ω load) 1,000 V/μs (@ 40 dB, 50 Ω load)
Power Supply	Supply Voltage	± 15 V
	Supply Current	± 70 mA typ. (depends on operating conditions, recommended power supply capability min. ± 150 mA)

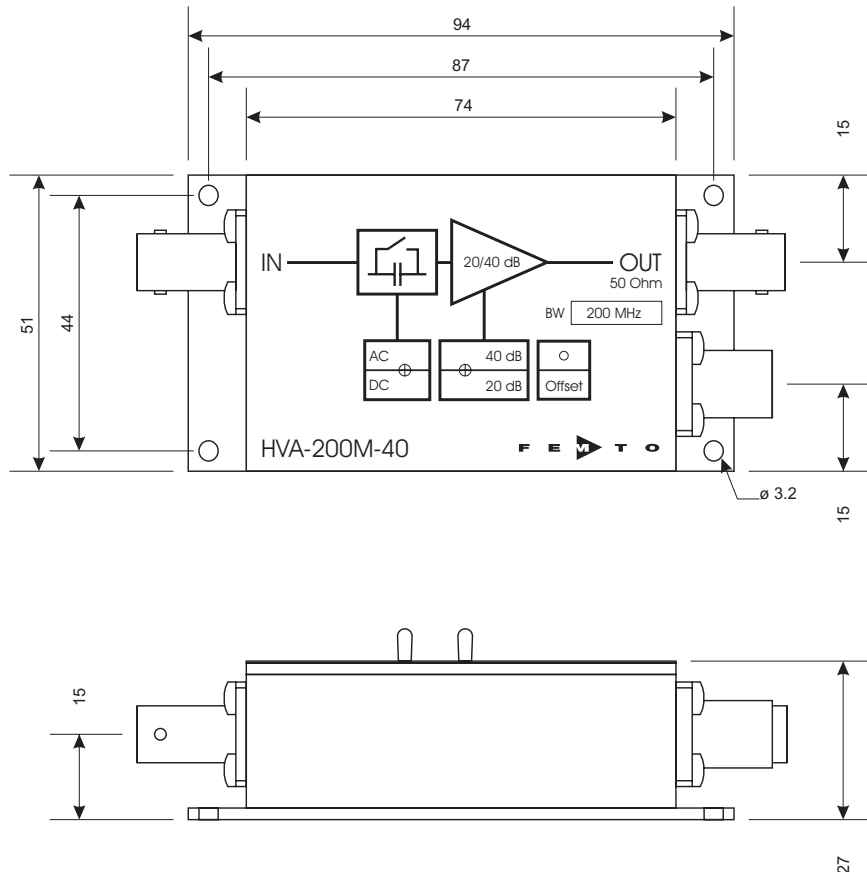
200 MHz Low-Noise Voltage Amplifier

Specifications (continued)		
Case	Weight Material	200 g (0.5 lbs) AlMg4.5Mn, nickel-plated
Temperature Range	Storage Temperature Operating Temperature	- 40 ... + 100 °C 0 ... + 60 °C
Absolute Maximum Ratings	Power Supply Voltage Input Voltage	± 20 V ± 5 V
Connectors	Input Output Power Supply	BNC BNC LEMO series 1S, 3-pin fixed socket Pin 1: + 15V Pin 2: - 15V Pin 3: GND



200 MHz Low-Noise Voltage Amplifier

Dimensions



all measures in mm unless otherwise noted

DZ_HVA-200M-40_R2

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