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		Test Conditions	Vs = ± 15 V, Ta = 25°C
	Gain	Gain Gain Accuracy	20/40 dB switchable ± 0.2 dB
	Frequency Response	Lower Cut-Off Frequency (-3 dB) Upper Cut-Off Frequency (-3 dB) Rise/Fall Time (10% - 90%)	DC/1 kHz switchable 200 MHz 1.8 ns
	Input	Input Impedance Input Voltage Noise Intregrated Input Noise Input Bias Current Input Offset Voltage Input Voltage Drift	50 Ω ll 12 pF 1.2 nV/√Hz (@ 50 MHz, 40 dB gain) 3.5 nV/√Hz (@ 50 MHz, 20 dB gain) 150 µV peak-peak (@ 40 dB gain) 400 µV peak-peak (@ 20 dB gain) 20 µA 500 µV typ. 1 µV/°C
	Output	Output Impedance Output Voltage Max. Output Current Output Offset Trimmer Range Slew Rate	50 Ω (terminate with 50 Ω load for best performance) ± 1 V (@ 50 Ω load, for linear amplification) 60 mA ± 100 mV 500 V/µs (@ 20 dB, 50 Ω load) 1,000 V/µs (@ 40 dB, 50 Ω load)
	Power Supply	Supply Voltage Supply Current	± 15 V ± 70 mA typ. (depends on operating conditions, recommended power supply capability min. ± 150 mA)
	Case	Weight Material	200 g (0.5 lbs) AlMg4.5Mn, nickel-plated

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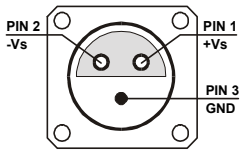
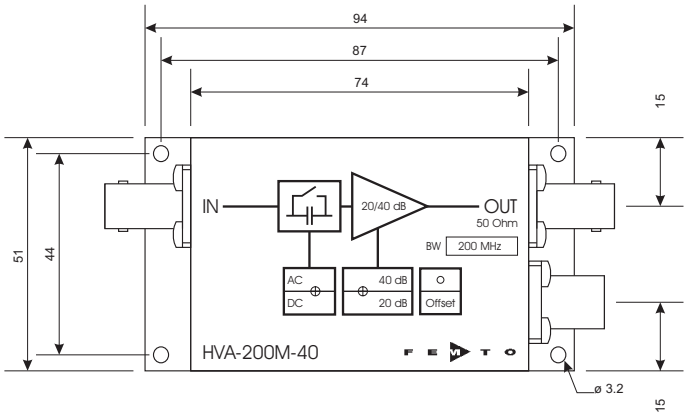
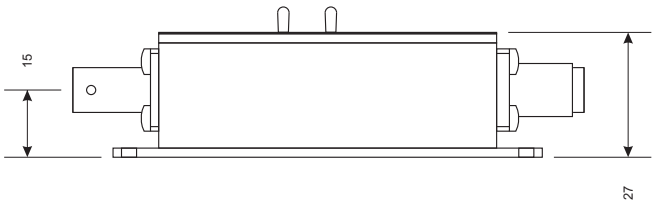
Specifications (continued)		
Temperature Range	Storage Temperature Operating Temperature	- 40 ... + 100 °C 0 ... + 60 °C
Absolute Maximum Ratings	Power Supply Voltage Input Voltage	± 20 V ± 5 V
Connectors	Input Output Power Supply	BNC BNC LEMO series 1S, 3-pin fixed socket Pin 1: + 15V Pin 2: - 15V Pin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



Dimensions





all measures in mm unless otherwise noted

DZ_HVA-200M-40_R2

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