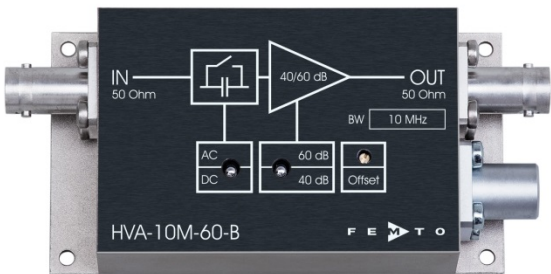


Datasheet

HVA-10M-60-B

10 MHz Low-Noise  
Voltage Amplifier



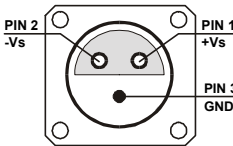
Features	<ul style="list-style-type: none"><li>• <b>Switchable Gain 40/60 dB (x100 / x1,000)</b></li><li>• <b>Bandwidth DC ... 10 MHz</b></li><li>• <b>Low Input Noise of 0.9 nV/√Hz</b></li><li>• <b>Switchable AC/DC Coupling</b></li></ul>	
Applications	<ul style="list-style-type: none"><li>• <b>Oscilloscope and Transient Recorder Preamplifier</b></li><li>• <b>Photomultiplier and Microchannel Plate Amplifier</b></li><li>• <b>Signal Booster for Optical Receivers and Current Amplifiers</b></li><li>• <b>Time-Resolved Pulse and Transient Measurements</b></li></ul>	
Specifications	Test Conditions	Vs = ± 15 V, Ta = 25°C
Gain	Gain	40/60 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)	10 MHz
	Rise/Fall Time (10% - 90%)	35 ns
Input	Input Impedance	50 Ω    12 pF
	Input Voltage Noise	0.9 nV/√Hz (@ 2 MHz, 60 dB gain) 1.8 nV/√Hz (@ 2 MHz, 40 dB gain)
	Intregrated Input Noise	20 μV peak-peak (@ 60 dB gain) 50 μV peak-peak (@ 40 dB gain)
	Input Bias Current	18 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	± 3.5 V (@ 50 Ω load, for linear amplification)
	Max. Output Current	100 mA
	Output Offset Trimmer Range	± 500 mV
	Slew Rate	500 V/μs (@ 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)
Case	Weight	200 g (0.5 lbs)
	Material	AlMg4.5Mn, nickel-plated

Datasheet

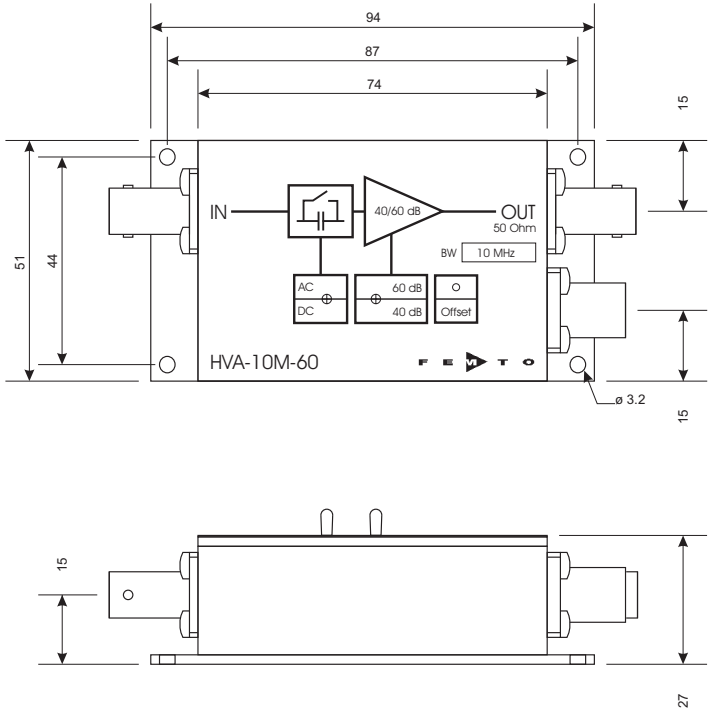
HVA-10M-60-B

10 MHz Low-Noise  
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
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-10M-60\_R2

FEMTO Messtechnik GmbH  
Klosterstr. 64  
10179 Berlin · Germany  
Phone: +49 30 280 4711-0  
Fax: +49 30 280 4711-11  
Email: [info@femto.de](mailto:info@femto.de)  
[www.femto.de](http://www.femto.de)

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