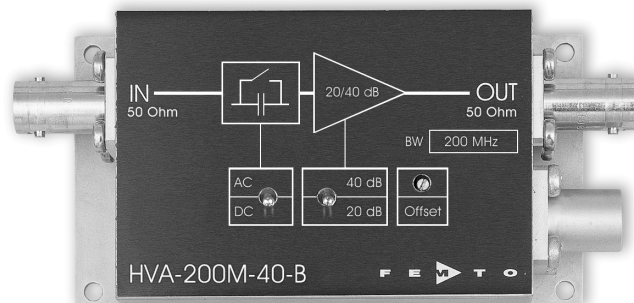


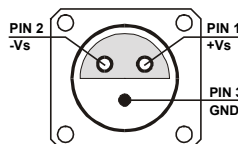
## 200 MHz Low-Noise Voltage Amplifier



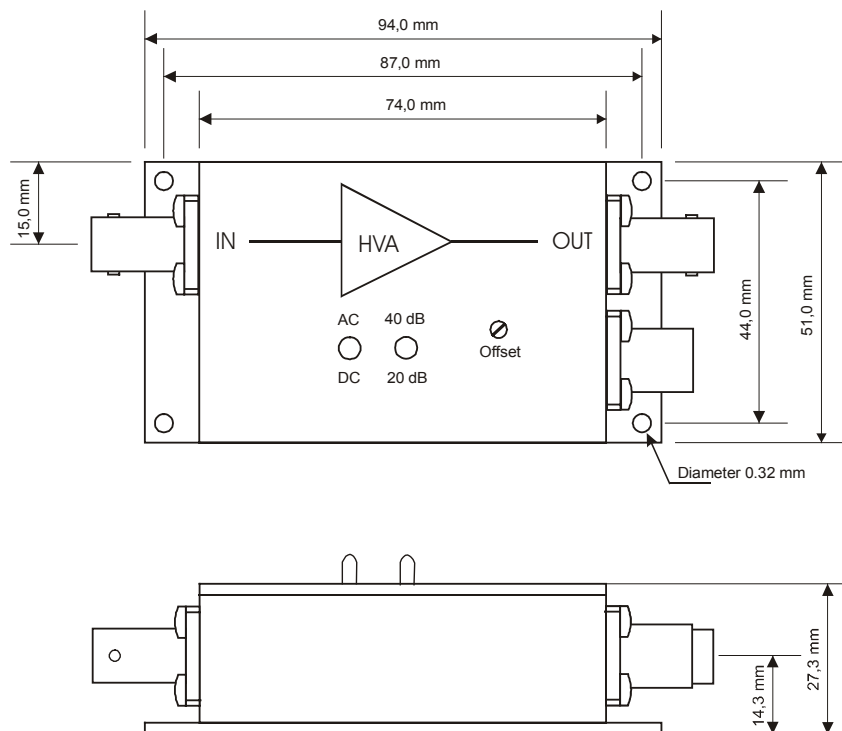
<p>Features</p>	<ul style="list-style-type: none"> <li>• <b>Gain 20/40 dB (x10/x100) switchable</b></li> <li>• <b>Bandwidth DC ... 200 MHz</b></li> <li>• <b>1.0 nV/√Hz Input Noise</b></li> <li>• <b>Switchable AC/DC Coupling</b></li> </ul>															
<p>Applications</p>	<ul style="list-style-type: 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>															
<p>Specifications</p>	<table border="0"> <tr> <td>Test Conditions</td> <td><math>V_s = \pm 15\text{ V}</math>, <math>T_a = 25^\circ\text{C}</math></td> </tr> <tr> <td>Gain</td> <td>Gain: 20/40 dB switchable Gain Accuracy: <math>\pm 0.2\text{ dB}</math></td> </tr> <tr> <td>Frequency Response</td> <td>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</td> </tr> <tr> <td>Input</td> <td>Input Impedance: <math>50\ \Omega \parallel 12\text{ pF}</math> Input Voltage Noise: 1.0 nV/√Hz (@ 50 MHz, 40 dB) 3.5 nV/√Hz (@ 50 MHz, 20 dB) Input Bias Current: 20 <math>\mu\text{A}</math> Input Offset Voltage: 500 <math>\mu\text{V}</math> typ. Input Voltage Drift: 1 <math>\mu\text{V}/^\circ\text{C}</math></td> </tr> <tr> <td>Output</td> <td>Output Impedance: <math>50\ \Omega</math> Output Voltage: 2 Vpp (@ 50 <math>\Omega</math> load, for linear Amplification) Max. Output Current: 60 mA Output Offset Trimmer Range: <math>\pm 100\text{ mV}</math> Slew Rate: 500 V/<math>\mu\text{s}</math> (@ 20 dB, 50 <math>\Omega</math> load) 1,000 V/<math>\mu\text{s}</math> (@ 40 dB, 50 <math>\Omega</math> load)</td> </tr> <tr> <td>Power Supply</td> <td>Supply Voltage: <math>\pm 15\text{ V}</math> Supply Current: <math>\pm 70\text{ mA}</math> typ. (no-signal) recommended Power Supply Capability minimum 150 mA</td> </tr> <tr> <td>Case</td> <td>Weight: 200 g (0.5 lbs) Material: AlMg4.5Mn, nickel-plated</td> </tr> </table>		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 kHz switchable Upper Cut-Off Frequency (-3 dB): 200 MHz Rise/Fall Time (10% - 90%): 1.8 ns	Input	Input Impedance: $50\ \Omega \parallel 12\text{ pF}$ Input Voltage Noise: 1.0 nV/√Hz (@ 50 MHz, 40 dB) 3.5 nV/√Hz (@ 50 MHz, 20 dB) Input Bias Current: 20 $\mu\text{A}$ Input Offset Voltage: 500 $\mu\text{V}$ typ. Input Voltage Drift: 1 $\mu\text{V}/^\circ\text{C}$	Output	Output Impedance: $50\ \Omega$ Output Voltage: 2 Vpp (@ 50 $\Omega$ load, for linear Amplification) Max. Output Current: 60 mA Output Offset Trimmer Range: $\pm 100\text{ mV}$ Slew Rate: 500 V/ $\mu\text{s}$ (@ 20 dB, 50 $\Omega$ load) 1,000 V/ $\mu\text{s}$ (@ 40 dB, 50 $\Omega$ load)	Power Supply	Supply Voltage: $\pm 15\text{ V}$ Supply Current: $\pm 70\text{ mA}$ typ. (no-signal) recommended Power Supply Capability minimum 150 mA	Case	Weight: 200 g (0.5 lbs) Material: AlMg4.5Mn, nickel-plated
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## 200 MHz Low-Noise Voltage Amplifier

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



DZ-HVA-200M-40\_1

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