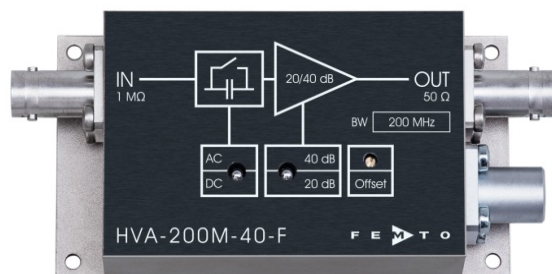


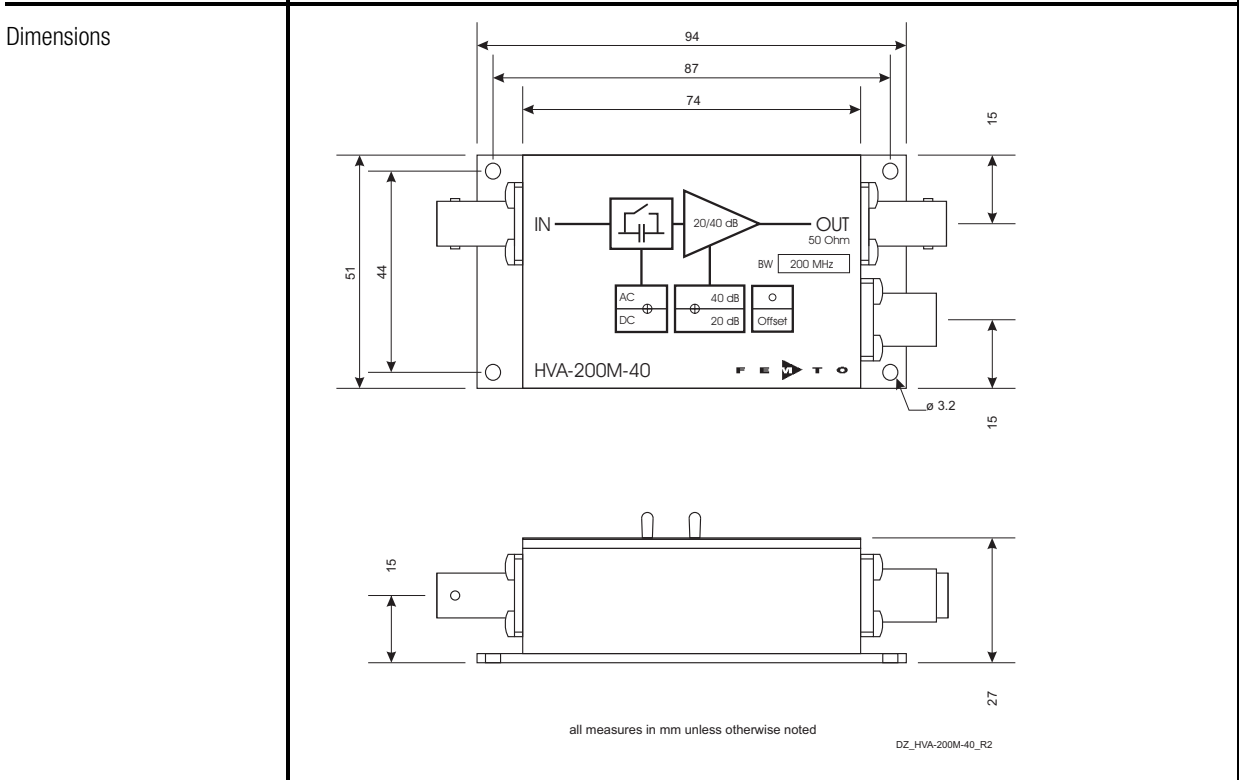
## 200 MHz High Input Impedance Voltage Amplifier



|                |   |  |
|----------------|---|--|
| Features       | <ul style="list-style-type: none"> <li>• <b>Switchable Gain 20/40 dB (x10 / x100)</b></li> <li>• <b>Bandwidth DC ... 200 MHz</b></li> <li>• <b>High Input Impedance 1 MΩ</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 | <p>Test Conditions</p> <p>Gain</p> <p>Frequency Response</p> <p>Input</p> <p>Output</p> <p>Power Supply</p> <p>Case</p>   | <p><math>V_s = \pm 15\text{ V}</math>, <math>T_a = 25^\circ\text{C}</math></p> <p>20/40 dB switchable<br/>± 0.2 dB</p> <p>DC/1 Hz switchable<br/>200 MHz<br/>1.8 ns</p> <p>1 MΩ    15 pF<br/>4.5 nV/√Hz (@ 50 MHz, 40 dB gain)<br/>5.5 nV/√Hz (@ 50 MHz, 20 dB gain)<br/>450 μV peak-peak (@ 40 dB gain)<br/>600 μV peak-peak (@ 20 dB gain)</p> <p>10 pA<br/>500 μV typ.<br/>5 μV/°C</p> <p>50 Ω (terminate with 50 Ω load for best performance)<br/>± 1 V (@ 50 Ω load, for linear amplification)<br/>60 mA<br/>± 100 mV<br/>600 V/μs (@ 20 dB, 50 Ω load)<br/>1,100 V/μs (@ 40 dB, 50 Ω load)</p> <p>± 15 V<br/>± 70 mA typ. (depends on operating conditions, recommended power supply capability min. ± 150 mA)</p> <p>200 g (0.5 lbs)<br/>AlMg4.5Mn, nickel-plated</p> |

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|                            |  |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
|----------------------------|--|----------------------|---------------------|-------------------|-------|-------------------------|------------------------------------|--|--------------|--|--------------|--|------------|
| Specifications (continued) | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Temperature Range</td> <td style="padding: 2px;">Storage Temperature</td> <td style="padding: 2px;">- 40 ... + 100 °C</td> </tr> <tr> <td></td> <td style="padding: 2px;">Operating Temperature</td> <td style="padding: 2px;">0 ... + 60 °C</td> </tr> </table>  | Temperature Range    | Storage Temperature | - 40 ... + 100 °C |       | Operating Temperature   | 0 ... + 60 °C                      |  |              |  |              |  |            |
| Temperature Range          | Storage Temperature  | - 40 ... + 100 °C    |                     |                   |       |                         |                                    |  |              |  |              |  |            |
|                            | Operating Temperature  | 0 ... + 60 °C        |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Absolute Maximum Ratings   | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Power Supply Voltage</td> <td style="padding: 2px;">± 20 V</td> </tr> <tr> <td style="padding: 2px;">Input Voltage</td> <td style="padding: 2px;">± 5 V</td> </tr> <tr> <td style="padding: 2px;">Transient Input Voltage</td> <td style="padding: 2px;">200 V (out of a 200 pF source)</td> </tr> </table>   | Power Supply Voltage | ± 20 V              | Input Voltage     | ± 5 V | Transient Input Voltage | 200 V (out of a 200 pF source)     |  |              |  |              |  |            |
| Power Supply Voltage       | ± 20 V   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Input Voltage              | ± 5 V  |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Transient Input Voltage    | 200 V (out of a 200 pF source)   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Connectors                 | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Input</td> <td style="padding: 2px;">BNC</td> </tr> <tr> <td style="padding: 2px;">Output</td> <td style="padding: 2px;">BNC</td> </tr> <tr> <td style="padding: 2px;">Power Supply</td> <td style="padding: 2px;">LEMO series 1S, 3-pin fixed socket</td> </tr> <tr> <td></td> <td style="padding: 2px;">Pin 1: + 15V</td> </tr> <tr> <td></td> <td style="padding: 2px;">Pin 2: - 15V</td> </tr> <tr> <td></td> <td style="padding: 2px;">Pin 3: GND</td> </tr> </table> <div style="text-align: center; margin-top: 10px;"> </div> | Input                | BNC                 | Output            | BNC   | Power Supply            | LEMO series 1S, 3-pin fixed socket |  | Pin 1: + 15V |  | Pin 2: - 15V |  | Pin 3: GND |
| Input                      | BNC  |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Output                     | BNC  |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
| Power Supply               | LEMO series 1S, 3-pin fixed socket   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
|                            | Pin 1: + 15V   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
|                            | Pin 2: - 15V   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |
|                            | Pin 3: GND   |                      |                     |                   |       |                         |                                    |  |              |  |              |  |            |



FEMTO Messtechnik GmbH  
 Klosterstr. 64  
 10179 Berlin · Germany  
 Phone: +49 30 280 4711-0  
 Fax: +49 30 280 4711-11  
 Email: info@femto.de  
 www.femto.de

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