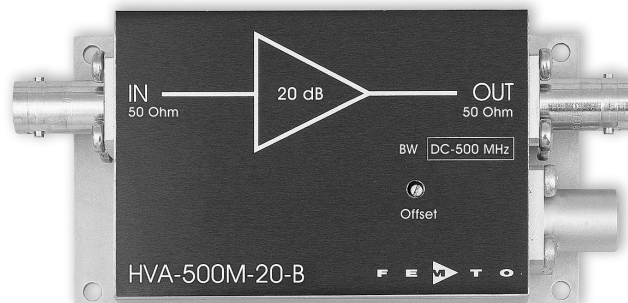


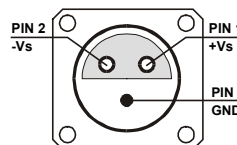
# True DC-Coupled 500 MHz Low Noise Voltage Amplifier



Features	<ul style="list-style-type: none"> <li>• <b>Gain 20 dB (x10)</b></li> <li>• <b>Bandwidth DC ... 500 MHz</b></li> <li>• <b>True DC-Coupling, Output Offset Voltage Adjustable</b></li> <li>• <b>3.4 nV/√Hz Input Noise</b></li> </ul>	
Applications	<ul style="list-style-type: none"> <li>• <b>Oscilloscope and Transient-Recorder Preamplifier</b></li> <li>• <b>Ideal for Analyzing Digital Signals (No Baseline Shift at any Digital Code)</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>Gain Accuracy</p> <p>Frequency Response</p> <p>Lower Cut-Off Frequency</p> <p>Upper Cut-Off Frequency (-3 dB)</p> <p>Rise/Fall Time (10% - 90%)</p> <p>Input</p> <p>Input Impedance</p> <p>Input Voltage Noise</p> <p>Integrated Input Noise</p> <p>Input Bias Current</p> <p>Input Offset Voltage</p> <p>Input Voltage Drift</p> <p>Output</p> <p>Output Impedance</p> <p>Output Voltage</p> <p>Max. Output Current</p> <p>Output Offset Voltage</p> <p>Slew Rate</p> <p>Power Supply</p> <p>Supply Voltage</p> <p>Supply Current</p> <p>Case</p> <p>Weight</p> <p>Material</p>	<p><math>V_s = \pm 15\text{ V}, T_a = 25^\circ\text{C}</math></p> <p>20 dB (@ 50 Ω load)</p> <p>± 0.2 dB</p> <p>DC</p> <p>500 MHz (± 10 %)</p> <p>750 ps</p> <p>50 Ω    3 pF</p> <p>3.4 nV/√Hz (@ 200 MHz)</p> <p>0.5 mV peak-peak</p> <p>15 μA typ.</p> <p>1 mV typ.</p> <p>10 μV / °C</p> <p>50 Ω (terminate with 50 Ω load for best performance)</p> <p>2 Vpp (@ 50 Ω load, for linear amplification)</p> <p>100 mA</p> <p>0 V, adjustable by offset trimpot within ± 70 mV</p> <p>2,600 V/μs (@ 50 Ω load)</p> <p>± 15 V</p> <p>± 40 mA typ.</p> <p>(depends on operating conditions, recommended power supply capability minimum ± 150 mA)</p> <p>200 g (0.5 lbs)</p> <p>AlMg4.5Mn, nickel-plated</p>

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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		
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DZ-HVA-500M-20-B\_1

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