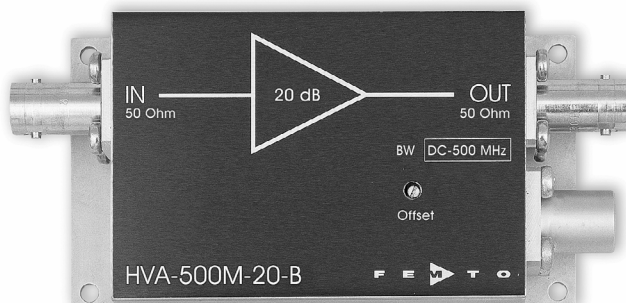




Datasheet

HVA-500M-20-B

True DC-Coupled 500 MHz Low Noise Voltage Amplifier



Features

- **Gain 20 dB (x10)**
- **Bandwidth DC ... 500 MHz**
- **True DC-Coupling, Adjustable Output Offset Voltage**
- **3.0 nV/√Hz Input Noise**

Applications

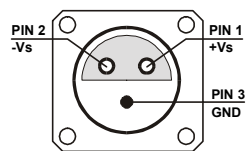
- **Oscilloscope and Transient Recorder Preamplifier**
- **Ideal for Analyzing Digital Signals (No Baseline Shift at any Digital Code)**
- **Photomultiplier and Microchannel Plate Amplifier**
- **Signal Booster for Optical Receivers and Current Amplifiers**
- **Time-Resolved Pulse and Transient Measurements**

Specifications

	<i>Test Conditions</i>	<i>Vs = ± 15 V, Ta = 25°C</i>
Gain	Gain	20 dB (@ 50 Ω load)
	Gain Accuracy	± 0.2 dB
Frequency Response	Lower Cut-Off Frequency	DC
	Upper Cut-Off Frequency (-3 dB)	500 MHz (± 10 %)
	Rise/Fall Time (10% - 90%)	750 ps
Input	Input Impedance	50 Ω 3 pF
	Input Voltage Noise	3.0 nV/√Hz (@ 200 MHz)
	Integrated Input Noise	0.5 mV peak-peak
	Input Bias Current	15 μA typ.
	Input Offset Voltage	1 mV typ.
	Input Voltage Drift	10 μV / °C
Output	Output Impedance	50 Ω (terminate with 50 Ω load for best performance)
	Output Voltage	± 1 V (@ 50 Ω load, for linear amplification)
	Max. Output Current	100 mA
	Output Offset Trimmer Range	± 100 mV
	Slew Rate	2,600 V/μs (@ 50 Ω load)
Power Supply	Supply Voltage	± 15 V
	Supply Current	± 40 mA typ. (depends on operating conditions, recommended power supply capability minimum ± 150 mA)
Case	Weight	200 g (0.5 lbs)
	Material	AlMg4.5Mn, nickel-plated

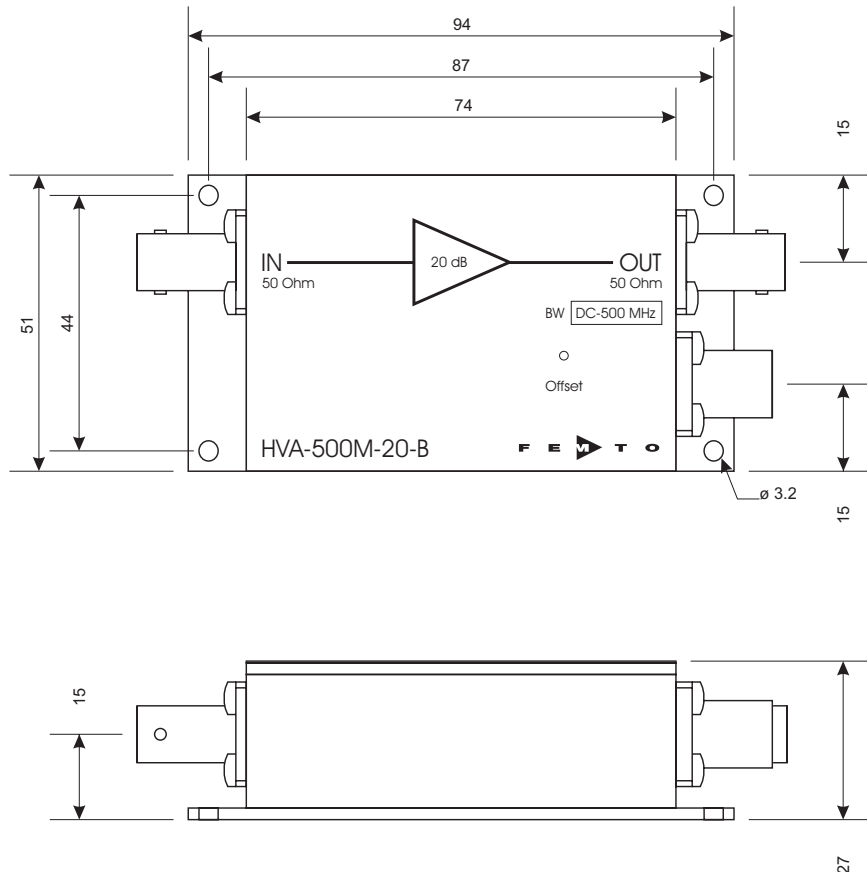
True DC-Coupled 500 MHz Low Noise Voltage Amplifier

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



True DC-Coupled 500 MHz Low Noise Voltage Amplifier

Dimensions



all measures in mm unless otherwise noted

DZ_HVA-500M-20_R2

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