

DCA - XX

Ultra Low Drift Wideband Amplifiers

The DCA series amplifiers use a composite principle to achieve high bandwidth, low drift and high gain stability. They can be used for a wide variety of signal level or signal polarity matching applications and for current-voltage conversion. Due to a flexible design and manufacturing principle the amplifiers can easily be matched to customer specific requirements. Different gain, bandwidth or input and output impedance values are available on request.



	DCA-1-5V	DCA-2-5V	DCA-1-12V	DCA-2-12V
Bandwidth ($V_{outpp} < 2V$, MHz)	DC to 400	DC to 250	DC to 100	DC to 75
Gain (other values on request)	-1 or -2	+ 4 or +10	-1 or -2	+4 or +10
Input Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Input Offset Voltage	0,5 mV	0,5 mV	0,5 mV	0,5 mV
Offset Drift	10 $\mu V/^{\circ}C$	10 $\mu V/^{\circ}C$	10 $\mu V/^{\circ}C$	10 $\mu V/^{\circ}C$
Input Noise (1kHz...100MHz)	2 nV/Hz ^{1/2}	2 nV/Hz ^{1/2}	2 nV/Hz ^{1/2}	2 nV/Hz ^{1/2}
Output Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Output Voltage Swing (50 Ω)	$\pm 1,5 V$	$\pm 1,5 V$	$\pm 4 V$	$\pm 4 V$
Output Voltage Swing (1 k Ω)	$\pm 3 V$	$\pm 3 V$	$\pm 10 V$	$\pm 10 V$
Power Supply	$\pm 5 V$	$\pm 5 V$	$\pm 12 V$	$\pm 12 V$
Connectors (other on request)	SMA	SMA	SMA	SMA
Dimensions (mm)	52 x 38 x 31	52 x 38 x 31	52 x 38 x 31	52 x 38 x 31

Power Supply Cable:

red: +5V (+12V)
white: GND

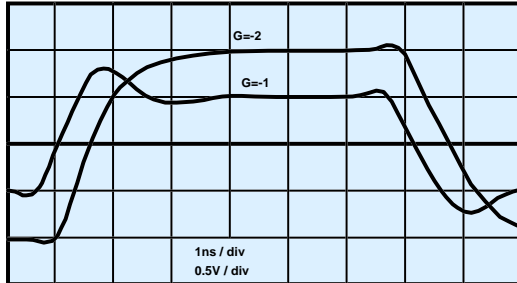
yellow: -5V (-12V)
black (shield): GND

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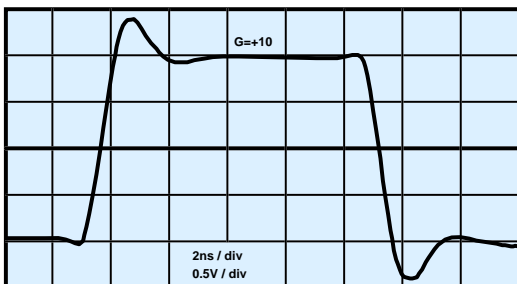


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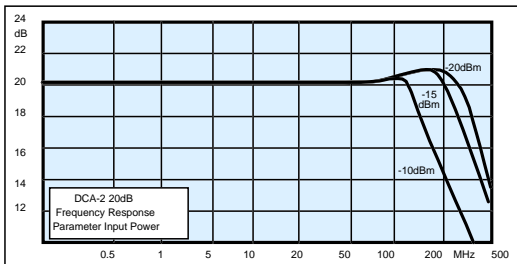
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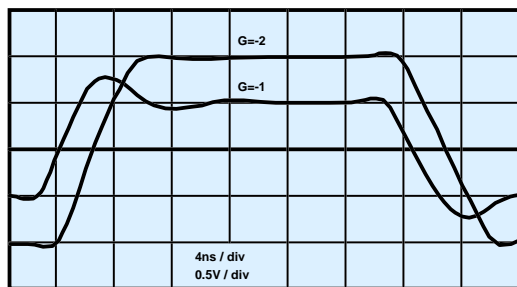
DCA-1-5V
Step Response (Gain = -1 and -2)



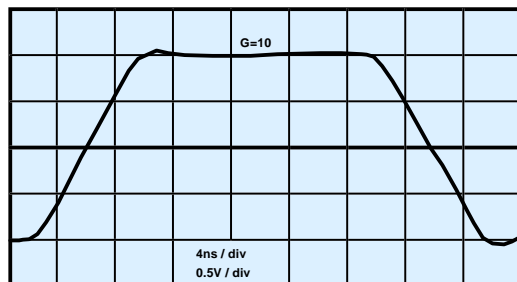
DCA-2-5V
Step Response (Gain = +10)



DCA-2-5V
Gain vs. Frequency at different Input Power



DCA-1-12V
Step Response (Gain = -1 and -2)



DCA-2-12V
Step response (Gain = +10)

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