



ULTRA LOW NOISE PRECISION DC COUPLED TRANSIMPEDANCE AMPLIFIER

- ULTRA LOW NOISE - DOWN TO $7fA/\sqrt{Hz}$
- HIGH GAIN - UP TO $1GV/A$
- BANDWIDTH - FROM DC TO 150kHz
- ACCEPTS CURRENT SOURCE INPUTS



DESCRIPTION:

The **341 Series** are state-of-the-art precision DC coupled amplifiers designed for current source input applications where high gain and low noise are required.

SPECIFICATIONS:

Input

Impedance Virtual ground, DC coupled
Capacitance See graphs on reverse for performance vs. capacitance. Indicate value of input capacitance (Add -___pF to part number.)
Drift See table on reverse

Output

Load $\geq 50\Omega$
Swing 16V pk-pk into $1k\Omega$
7V pk-pk into 50Ω (-1 & -2)
12V pk-pk into 50Ω (-3)
Offset Trimpot Adjustable

Gain

Trimpot adjustable (-3 only)

Polarity

Inverting (Add -INV to part number.)
Non-Inverting (Add -NI to part number.)

Power

$\pm 15VDC$ at 30mA typical (no load)

Temperature

0° to $+70^\circ C$

Connections

Input Pins
Output BNC
Power Filter feed-thru pins and ground lug
Bias Decoupled
Pin decoupled with $0.1\mu F$, 100V capacitor

Size

3.12" x 1.50" x 1.09"



Specifications subject to change without notice.

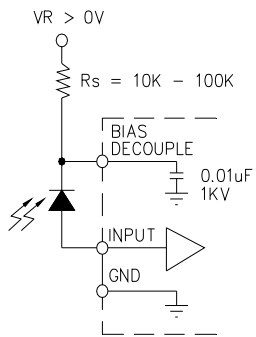
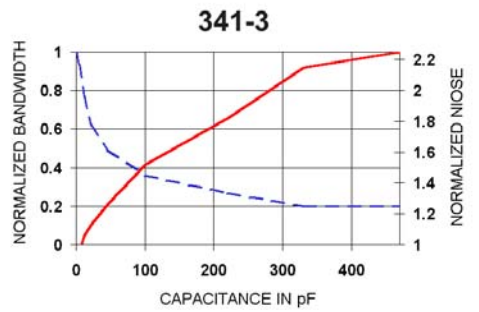
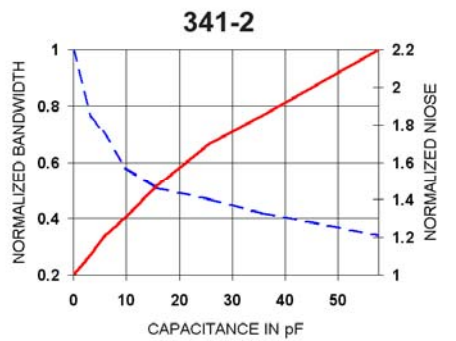
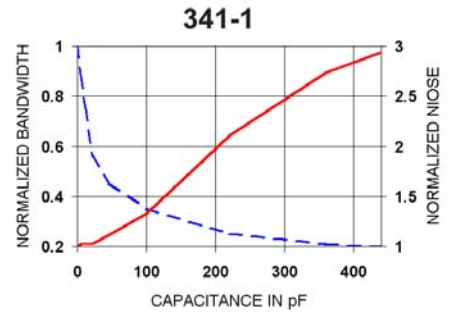
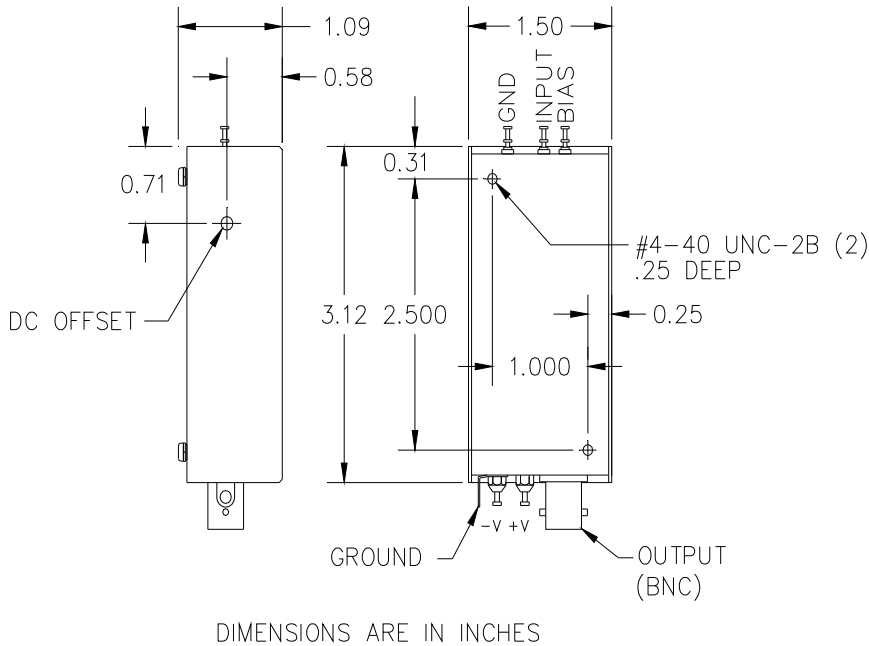
APPLICATIONS:

High Bandwidth, DC coupled Photodetector Amplifiers

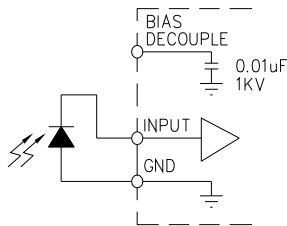
MODEL NUMBER

		GAIN		
		1GV/A	100MV/A	10-100MV/A
BANDWIDTH (1) ±20%	DC – 2kHz	341-1	-----	-----
	DC – 10kHz	-----	341-2	-----
	DC – 150kHz	-----	-----	341-3
	DC - 2MHz	-----	-----	-----
NOISE (1) ±20%	Current Noise (Open Circuit Input)	7fA/√Hz	20fA/√Hz	0.58pA/√Hz
DRIFT	Equivalent Input Current	24fA/°C	114fA/°C	10pA/°C

Typical Part Number: **341-1-INV-1pF** = Bandwidth: DC – 2kHz
 Gain: 1GV/A
 Noise: 7fA/√Hz
 Polarity: Inverting
 Input Capacitance: 1pF



PHOTOCONDUCTIVE MODE



PHOTOVOLTAIC MODE

TYPICAL PHOTODETECTOR APPLICATIONS