



## HIGH BANDWIDTH BIPOLAR TRANSIMPEDANCE AMPLIFIER

- BANDWIDTH - FROM  $\leq 1\text{kHz}$  TO 250MHz
- LOW NOISE - DOWN TO  $6.5\text{pA}/\sqrt{\text{Hz}}$
- HIGH GAIN - UP TO 20kV/A
- EXCELLENT STABILITY FOR HIGH CAPACITANCE SOURCES



### DESCRIPTION:

The **313A Series** are state-of-the-art bipolar amplifiers designed for current source input applications in which high gain and low noise are required. The design is optimized for high-speed response and has a lower input than the 312A Series, permitting operation with higher capacitive sources.

### SPECIFICATIONS:

<b>Input</b>		<b>Power</b>	+15VDC at 75mA typical
Impedance	Virtual ground, $50\Omega$ typical 0.7V offset, DC coupled	<b>Temperature</b>	-20° to +70°C
Capacitance	See graph on reverse for performance vs. capacitance. Indicate value of input capacitance (add - ___pF to part number.)	<b>Connections</b>	
<b>Output</b>		Input	Pins
Load	$\geq 50\Omega$	Output	BNC
Swing	+2V, -1.2V	Power	Filter feed-thru pins and ground lug
<b>Gain</b>	20kV/A	Bias Decoupled	Pin decoupled with $0.01\mu\text{F}$ , 1kV capacitor
<b>Polarity</b>	Non-inverting	<b>Size</b>	3.50" x 1.93" x 0.92"

Specifications subject to change without notice.



### APPLICATIONS:

*High Speed Photodetector Amplifier, High Capacitance Detector Preamplifier*

