



FAST PEAK PULSE STRETCHER

- 2 STAGE PEAK SENSE
- FAST INDEPENDENT RESETS
- HIGH INPUT IMPEDANCE
- INPUT GATING



DESCRIPTION:

The **611A Series** Pulse Stretchers output a DC level equal to the peak value of a single narrow pulse down to 20ns FWHM. Fast independent resets facilitate processing of complex multiple events. DC outputs allow for post-processing at slower speeds.

SPECIFICATIONS:

Input

Voltage 0 to 4V pulse
Pulsewidth $\geq 20\text{ns}$ FWHM, AC coupled (add -20 to part number)
 $\geq 50\text{ns}$ FWHM, AC coupled (add -50 to part number)
Impedance 50Ω (add -50 to part number)
 $10\text{k}\Omega$ (add -10k to part number)

Input Gating

TTL high gives 26dB attenuation
10ns gate setup time

Output

Voltage 0 to 4VDC up to 10mA
Gain 1.04V/V typical
Delay $< 1\mu\text{s}$
Drop $< 0.1\text{V/s}$ typical at 25°C; 2 stage

Size

3.12" x 1.50" x 1.09"

Weight

3.2 oz.

Reset(s)

Voltage 0 to 4V typical
Pulsewidth $\geq 50\text{ns}$ (Reset #1)
 $\geq 10\mu\text{s}$ (Reset #2)
TTL compatible, AC coupled
Separate reset for each stage

Accuracy

$\pm 3\%$ plus $\pm 20\text{mV}$ typical for 100mV to 4V, 20ns input pulse
 $\pm 1.5\%$ plus $\pm 20\text{mV}$ typical for 100mV to 4V, 50ns input pulse

Power

± 11 to $\pm 16\text{VDC}$ at 45mA typical
Internally regulated

Connections

Input BNC
Output BNC
Reset Pins
Gate Pin
Power Filter feed-thru pins and ground lug

Specifications subject to change without notice.

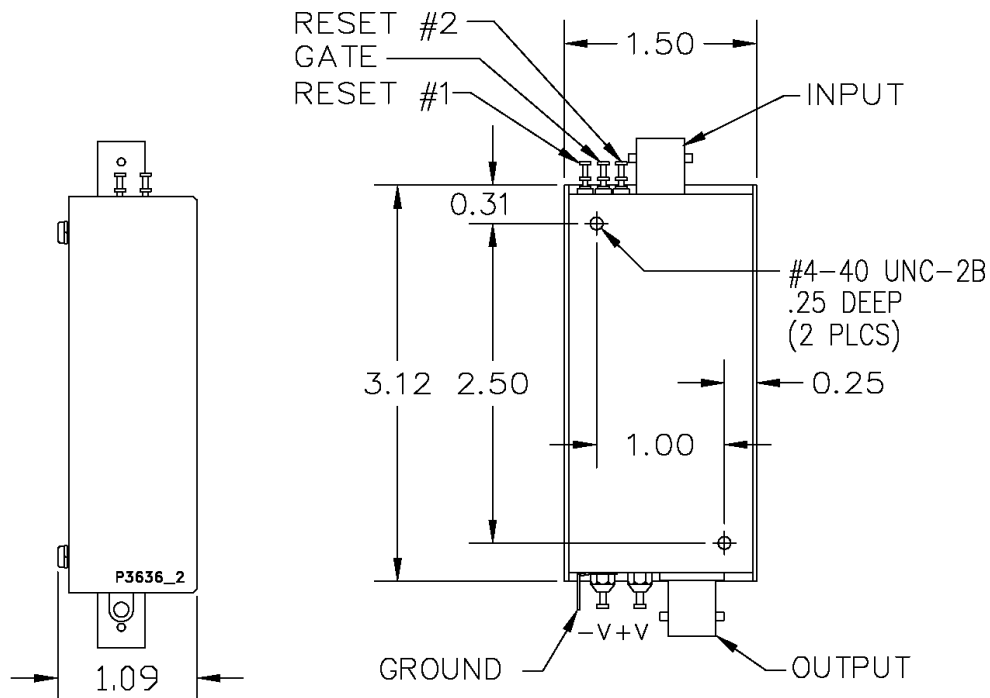


APPLICATIONS:

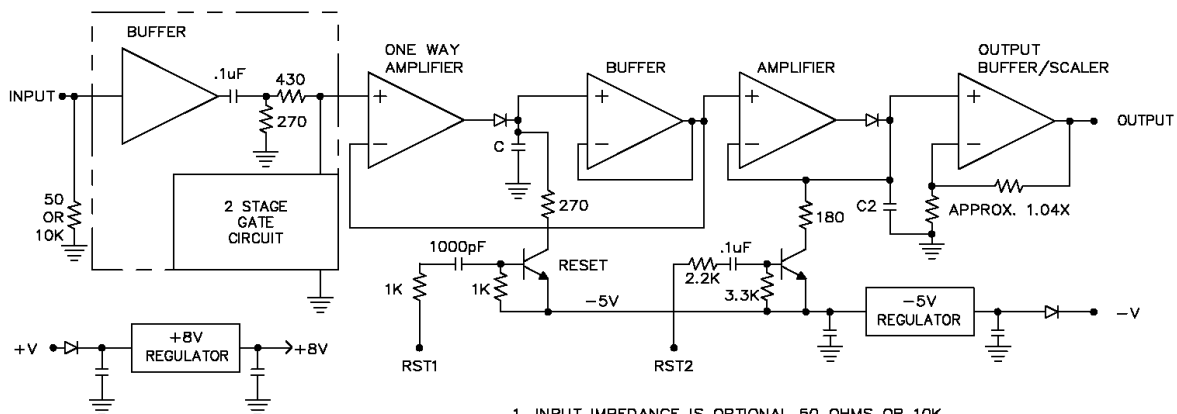
Laser Pulse Capture, Laser Peak Power Monitor, Quad Detector Pulse Processing, Ultrasound Pulse Stretcher, Electronic Transient Capture

		MODEL NUMBER	
		2 Stage < 0.1V/s Droop	
MINIMUM INPUT PULSEWIDTH	20ns FWHM	611A-2-20	
	50ns FWHM	611A-2-50	

Typical Part Number: 611A-2-20-10k = No. of Stages: 2
 Input Pulsewidth: $\geq 20\text{ns FWHM}$
 Gain: 1.04 typical
 Droop: $\leq 0.1\text{V/s}$
 Input Impedance: $10\text{k}\Omega$



DIMENSIONS ARE IN INCHES



1. INPUT IMPEDANCE IS OPTIONAL 50 OHMS OR 10K

611A EQUIVALENT SIMPLIFIED CIRCUIT

P3636_2.DWG