

## Logarithmic Hybrid Amplifiers

RTI has developed a series of hybrid log amplifiers that are 30% smaller than our RTL-4 Series without sacrificing the electrical performance characteristics found in the RTL-4 series log amplifiers.

### Key Features

- 80dB Dynamic Range
- $\pm 1$  dB Linearity
- DC Coupled Video
- Built-in Voltage Regulation
- Excellent Pulse Response



### Optional Specifications

Limited IF Output	0 dBm (add suffix B)
Power Supplies	$\pm 12$ V DC (add suffix C)
Matched Set	2,3 units/set (add suffix M)

### General Specifications

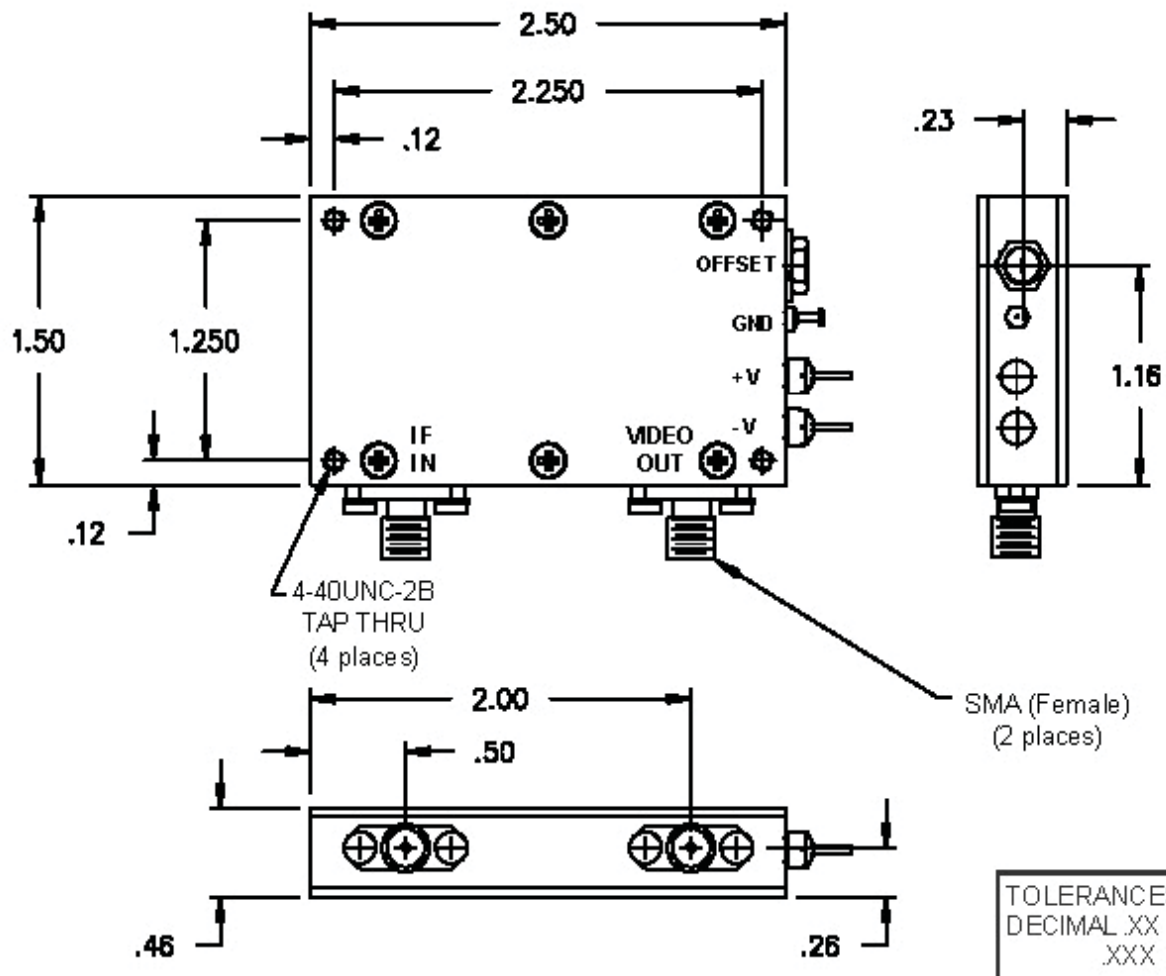
Linearity	$\pm 1$ dB (add $\pm 0.5$ dB over Temperature) ( $-30^{\circ}\text{C}$ to $+71^{\circ}\text{C}$ )
Sensitivity	25mV/dB (typ)
Source Impedance	50 Ohms
Video Load Impedance	93 Ohms
Power Requirements	$\pm 15$ VDC
Connectors	SMA

**Design Note:** Radar Technology can customize any of our products to meet your individual system requirements. RTI also offers many form, fit, function replacements to old RHG Electronics Amplifiers.

### Specification Table

Model	Center Frequency (MHz)	Bandwidth (MHz)	Rise Time ( $\mu\text{s}$ )	Dynamic Range (dB)	Input Power (dBm)
RTL-8-1003	10	3	0.5	80	-80 to 0
RTL-8-3002	30	2	0.5	80	-80 to 0
RTL-8-3004	30	4	0.25	80	-80 to 0
RTL-8-3010	30	10	0.1	80	-80 to 0
RTL-8-4510	45	10	0.1	80	-80 to 0
RTL-8-6010	60	10	0.1	80	-80 to 0
RTL-8-6020	60	20	0.05	80	-80 to 0
RTL-8-7010	70	10	0.1	80	-80 to 0
RTL-8-7020	70	20	0.05	80	-80 to 0
RTL-8-12020	120	20	0.05	70	-70 to 0
RTL-8-12040	120	40	0.03	70	-70 to 0
RTL-8-16020	160	20	0.05	70	-70 to 0
RTL-8-16030	160	30	0.04	70	-70 to 0
RTL-8-16040	160	40	0.03	70	-70 to 0

## Outline Drawing



### Notes:

1. Chassis and cover material : Aluminum alloy
2. Finish: Electroless Nickel per MIL-C-26074
3. All dimensions in inches