

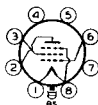


ILA4

POWER AMPLIFIER PENTODE



Filament	Coated	
Voltage	1.4	d-c volts
Current	0.05	amp.
Maximum Overall Length		2-25/32"
Maximum Seated Height		2-1/4"
Maximum Diameter		1-3/16"
Bulb		T-9
Base		Lock-in 8-Pin
Pin 1 - Filament +		Pin 5 - No Connection
Pin 2 - Plate		Pin 6 - Grid
Pin 3 - Screen		Pin 7 - No Connection
Pin 4 - No Connection		Pin 8 - Filament -
Mounting Position		Any



BOTTOM VIEW (5AD₁)

For curve and additional data, refer to Type 1A5GT/1A5G. The ILA4 and the 1A5GT/1A5G are identical electrically.

ILA6

PENTAGRID CONVERTER



Filament	Coated	
Voltage	1.4	d-c volts
Current	0.05	amp.
Direct Interelectrode Capacitances: ⁰		
Grid #4 to Plate		0.4 μ f
Grid #4 to Grid #2		0.3 μ f
Grid #4 to Grid #1		0.15 μ f
Grid #1 to Grid #2		0.6 μ f
Grid #4 to All Other Electrodes (R-F Input)		7.7 μ f
Grid #2 to All Other Electrodes Except Grid #1 (Osc. Output)		3.3 μ f
Grid #1 to All Other Electrodes Except Grid #2 (Osc. Input)		2.9 μ f
Plate to All Other Electrodes (Mixer Output)		8.0 μ f
Maximum Overall Length		2-25/32"
Maximum Seated Height		2-1/4"
Maximum Diameter		1-3/16"
Bulb		T-9
Base		Lock-in 8-Pin
Pin 1 - Filament +		Pin 5 - Grids #3 & #5
Pin 2 - Plate		Pin 6 - Grid #4
Pin 3 - Grid #2		Pin 7 - No Connection
Pin 4 - Grid #1		Pin 8 - Filament -
Mounting Position		Any



BOTTOM VIEW (7AK)

⁰ With close-fitting shield connected to negative filament terminal.

(continued on next page)

May 1, 1941

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

TENTATIVE DATA



1LA6

PENTAGRID CONVERTER

(continued from preceding page)

CONVERTER SERVICE

Plate Voltage	90 max.	volts
Screen (Grids #3 & #5) Voltage [▲]	55 max.	volts
Screen Supply Voltage	90 max.	volts
Anode-Grid (Grid #2) Voltage	90 max.	volts
Total Zero-Sig. Cathode Current	3 max.	ma.

Typical Operation and Characteristics:

Plate	90	volts
Screen	45	volts
Anode-Grid	90	volts
Control-Grid (Grid #4) ^{▲▲}	0	volts
Oscillator-Grid (Grid #1) Resistor	200000	ohms
Plate Res.	0.75 approx.	ohms
Conversion Transcond.	250	μmhos
Conversion Transcond. with Grid #4		
Bias of -3 volts	10 approx.	μmhos
Plate Cur.	0.55	ma.
Screen Cur.	0.6	ma.
Anode-Grid Cur.	1.2	ma.
Oscillator-Grid Cur.	0.035	ma.
Total Cathode Cur.	2.4	ma.

NOTE: The transconductance of the oscillator portion (not oscillating) is approximately 550 μmhos, and the anode grid current 2.2 ma. under the following conditions: plate volts, 90; screen volts, 45; control-grid volts, 0; anode-grid volts, 90; and oscillator-grid volts, 0.

[▲] Obtained preferably by using a properly by-passed 45000 to 75000-ohm voltage-dropping resistor in series with a 90-volt supply.

^{▲▲} A resistance of at least 1.0 megohm should be in the grid return to negative filament pin.

A Typical Pentagrid Circuit is shown under Type 1A6.