

## TWIN TRIODE

### DESCRIPTION

The GL-6201 is a miniature twin triode designed for use as a grounded-grid amplifier or as a frequency converter in very-high-frequency applications. The tube is specially designed to assure dependable life and reliable service under the exacting

conditions encountered in mobile and aircraft applications. Features include a high degree of mechanical strength and a heater-cathode construction designed to withstand many-thousand cycles of intermittent operation.

### TECHNICAL INFORMATION

#### GENERAL

##### Electrical Data

Cathode—Coated Unipotential		
Heater Voltage (A-c or D-c) . . . . .	6.3	12.6 Volts
Heater Current . . . . .	0.3	0.15 Ampere
Direct Interelectrode Capacitances	<b>With Shield*</b>	<b>Without Shield</b>
Grid to Plate (Each Section) . . . . .	1.6	1.6 uuf
Input (Each Section) . . . . .	2.5	2.3 uuf
Output (Section 1) . . . . .	1.2	0.4 uuf
Output (Section 2) . . . . .	1.3	0.38 uuf
Heater to Cathode (Each Section) . . . . .	2.8	2.8 uuf
Grounded-Grid Operation	<b>With Shield†</b>	<b>Without Shield</b>
Plate to Cathode (Section 1) . . . . .	0.18	0.2 uuf
Plate to Cathode (Section 2) . . . . .	0.2	0.24 uuf
Input (Each Section) . . . . .	5.0	5.0 uuf
Output (Section 1) . . . . .	2.7	1.9 uuf
Output (Section 2) . . . . .	2.7	1.8 uuf



**TECHNICAL INFORMATION (CONT'D)**

**Mechanical Data**

- Mounting Position—Any
- Envelope—T-6½ Glass
- Base—Small Button 9-Pin, E9-1

**MAXIMUM RATINGS**

Electrical—Design Center Values—Each Section

Plate Voltage . . . . .	300 Volts
Negative D-c Grid Voltage . . . . .	50 Volts
Plate Dissipation . . . . .	2.5 Watts
Heater-Cathode Voltage . . . . .	90 Volts

**Mechanical**

Peak Impact Acceleration in Any Direction . . . . .	600 G
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www.DataSheet4U.com **CHARACTERISTICS AND TYPICAL OPERATION**

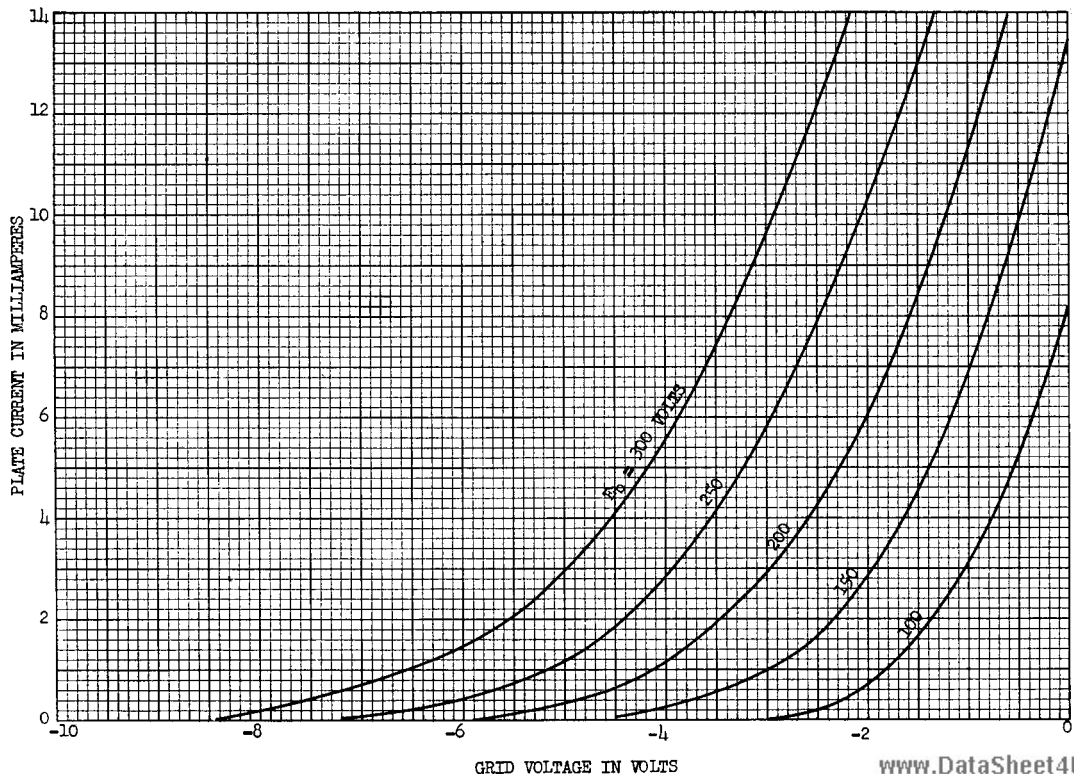
Class A<sub>1</sub> Amplifier—Each Section

Plate Voltage . . . . .	100	250 Volts
Cathode Bias Resistor . . . . .	270	200 Ohms
Amplification Factor . . . . .	57	60
Plate Resistance, approximate . . . . .	14,300	10,900 Ohms
Transconductance . . . . .	4000	5500 Micromhos
Plate Current . . . . .	3.3	10 Milliamperes
Grid Voltage, approximate for I <sub>b</sub> = 10 Microamperes . . . . .	-5	-12 Volts

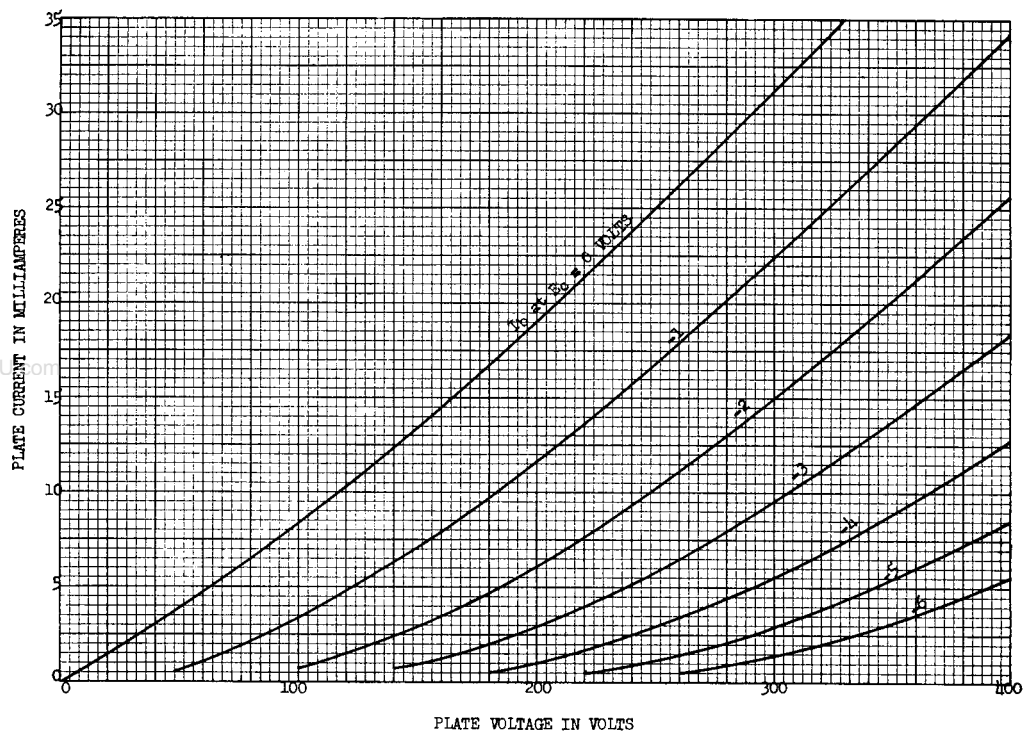
\* With external shield No. 315 connected to cathode of section under test.

† With external shield No. 315 connected to grid of section under test.

**AVERAGE CHARACTERISTICS  
(EACH SECTION)**



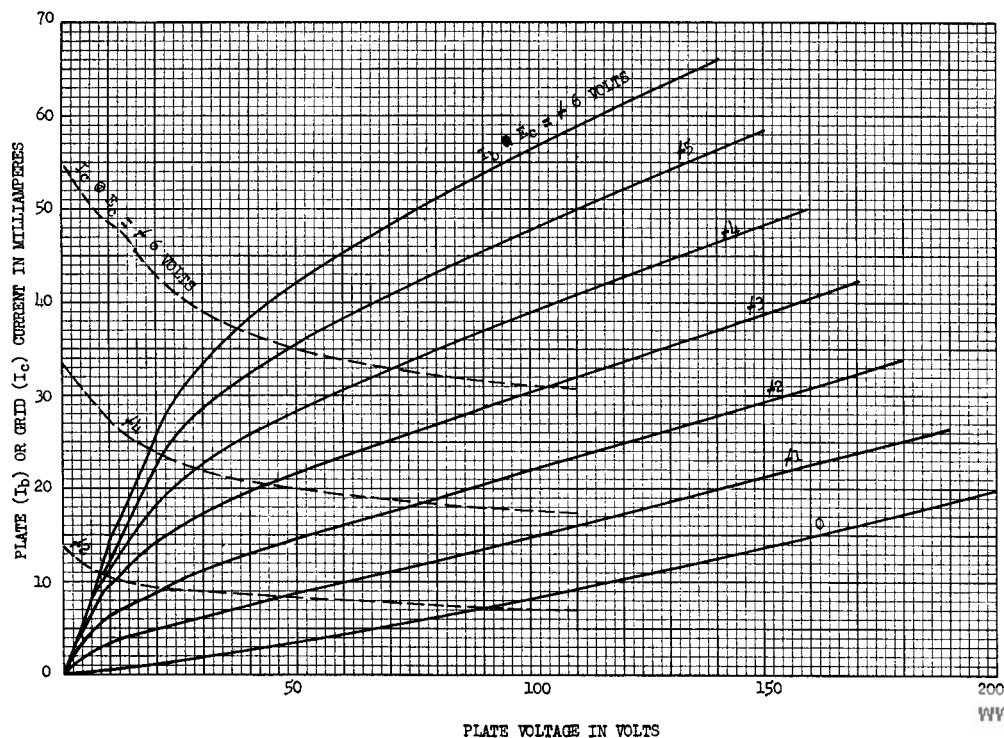
**AVERAGE PLATE CHARACTERISTICS  
(EACH SECTION)**



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**AVERAGE PLATE CHARACTERISTICS  
(EACH SECTION)**



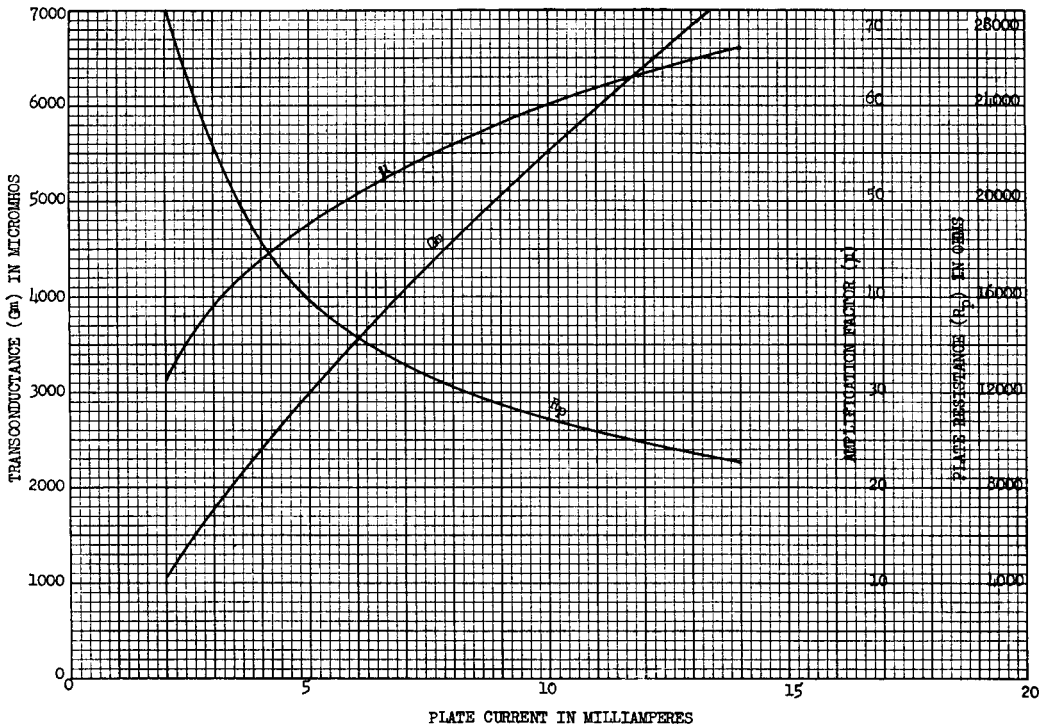
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AVERAGE CHARACTERISTICS  
(EACH SECTION)

$E_r = 12.6$  VOLTS

PLATE VOLTAGE = 250 VOLTS

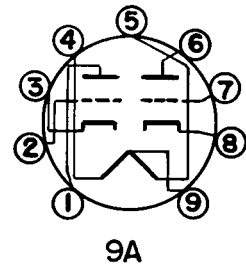
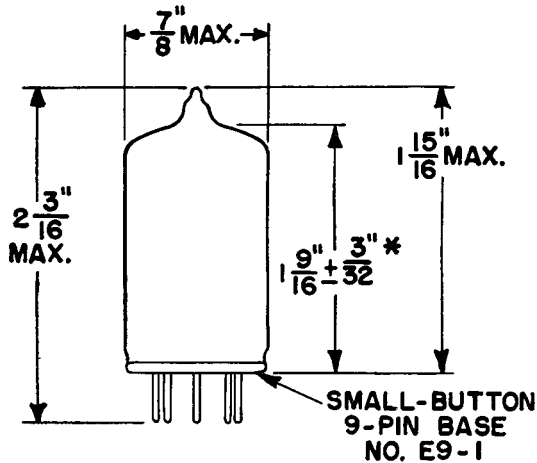


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OUTLINE

BASING DIAGRAM



- PIN 1: PLATE (SECTION NO. 2)
- PIN 2: GRID (SECTION NO. 2)
- PIN 3: CATHODE (SECTION NO. 2)
- PIN 4: HEATER
- PIN 5: HEATER
- PIN 6: PLATE (SECTION NO. 1)
- PIN 7: GRID (SECTION NO. 1)
- PIN 8: CATHODE (SECTION NO. 1)
- PIN 9: HEATER CENTER-TAP

\* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY RING GAGE OF  $7/16$ " I.D.

N-15155AZ

4-3-52

Tube Department



Schenectady, N. Y.