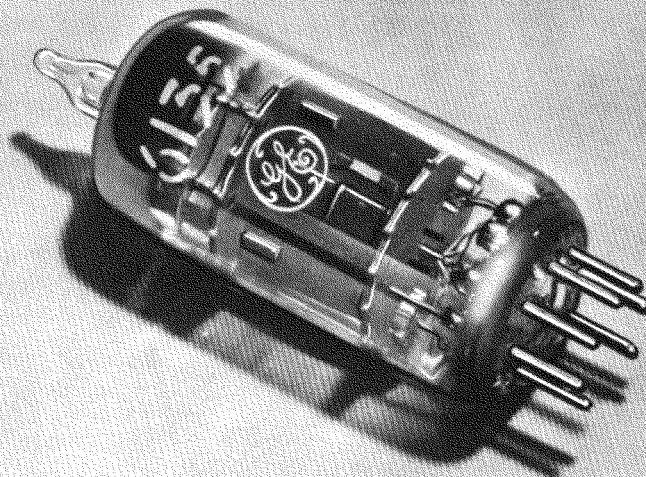




## TRIODE

### DESCRIPTION

The GL-6135 is a miniature medium-mu triode designed for use as a local oscillator in very-high-frequency receivers. It is also suitable for use as an audio amplifier and for use in general-purpose applications. The GL-6135 is specifically 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, a heater-cathode construction designed to withstand many-thousand cycles of intermittent operation, and a relatively high value of plate-to-grid insulation resistance throughout life.

### TECHNICAL INFORMATION

#### GENERAL

##### Electrical Data

|                                    |              |                |
|------------------------------------|--------------|----------------|
| Cathode—Coated Unipotential        |              |                |
| Heater Voltage (A-c or D-c)        | 6.3          | Volts          |
| Heater Current                     | 0.175        | Ampere         |
| Direct Interelectrode Capacitances | With Shield* | Without Shield |
| Grid to Plate                      | 1.4          | 1.4 uuf        |
| Input                              | 1.7          | 1.5 uuf        |
| Output                             | 2.6          | 0.7 uuf        |

##### Mechanical Data

Mounting Position—Any  
 Envelope—T-5½ Glass  
 Base—Miniature Button 7-pin, E7-1



## TECHNICAL INFORMATION (CONT'D)

### MAXIMUM RATINGS

Electrical—Design Center Values

|                                                |                 |
|------------------------------------------------|-----------------|
| Plate Voltage.....                             | 300 Volts       |
| Plate Dissipation.....                         | 3.5 Watts       |
| D-c Cathode Current.....                       | 25 Milliamperes |
| Heater-Cathode Voltage.....                    | 90 Volts        |
| Grid-Circuit Resistance                        |                 |
| With Fixed Bias.....                           | 0.25 Megohm     |
| With Cathode Bias.....                         | 1.0 Megohm      |
| Mechanical                                     |                 |
| Peak Impact Acceleration in Any Direction..... | 600 G           |

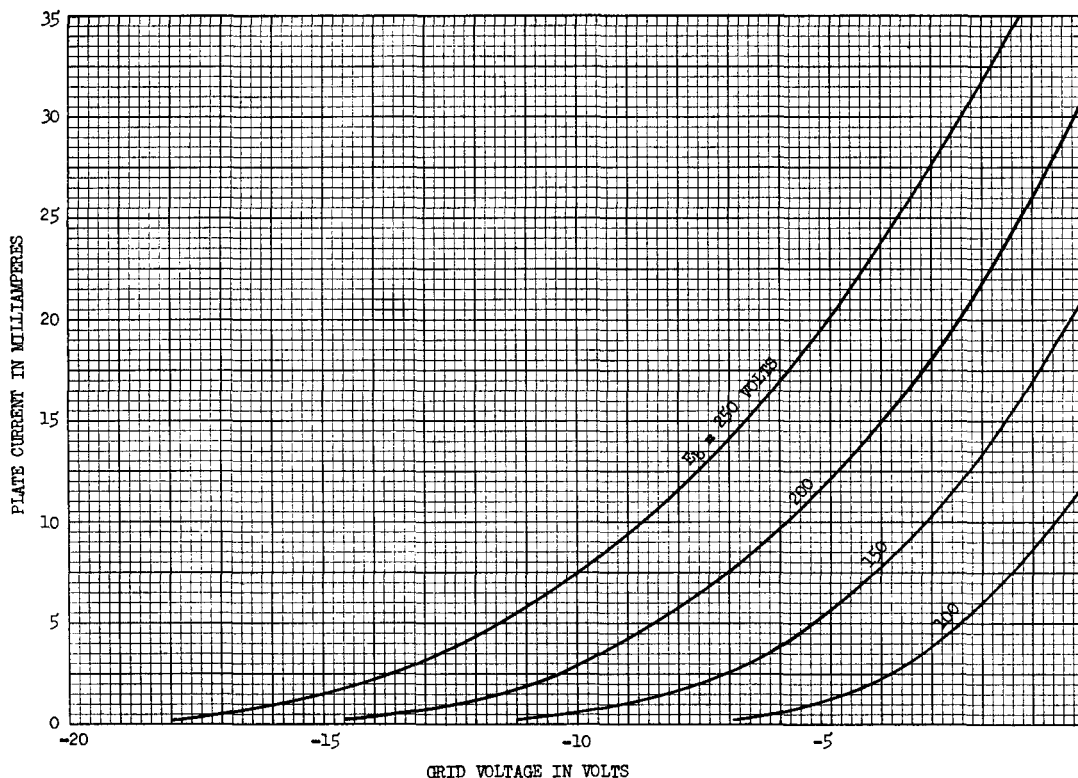
### CHARACTERISTICS AND TYPICAL OPERATION

Class A<sub>1</sub> Amplifier

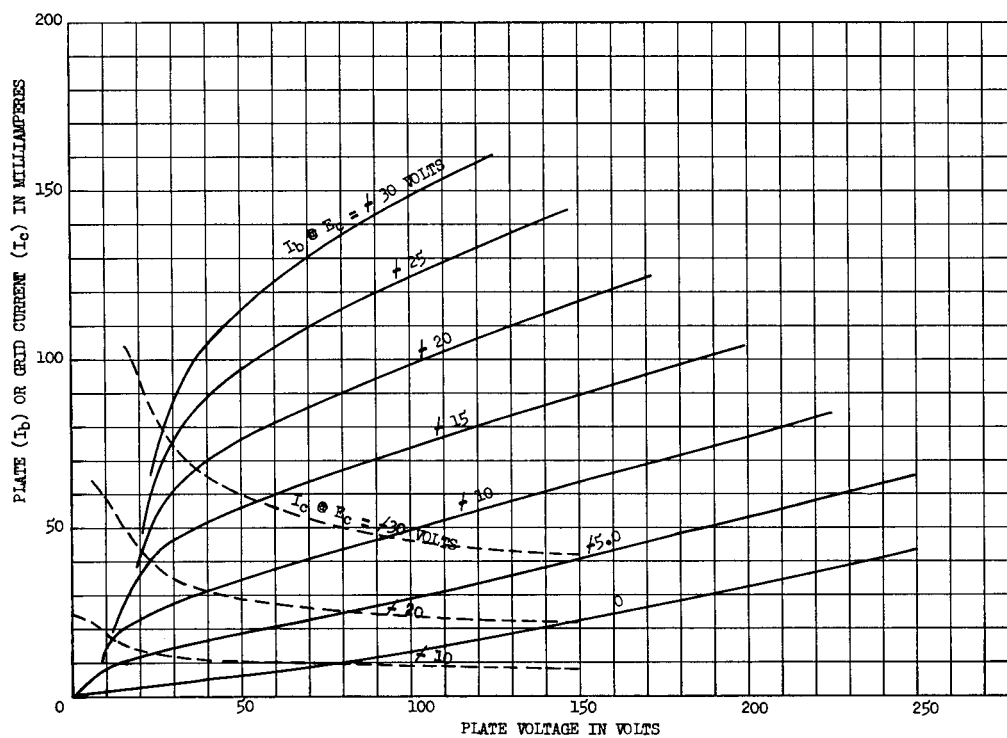
|                                                                     |      |                   |
|---------------------------------------------------------------------|------|-------------------|
| Plate Voltage.....                                                  | 100  | 250 Volts         |
| Grid Voltage.....                                                   | 0    | -8.5 Volts        |
| Amplification Factor.....                                           | 19.5 | 17                |
| Plate Resistance, approximate.....                                  | 6250 | 7700 Ohms         |
| Transconductance.....                                               | 3100 | 2200 Micromhos    |
| Plate Current.....                                                  | 11.8 | 10.5 Milliamperes |
| Grid Voltage, approximate for I <sub>b</sub> = 10 Microamperes..... |      | -21 Volts         |

\* With external shield No. 316 connected to cathode.

### AVERAGE CHARACTERISTICS



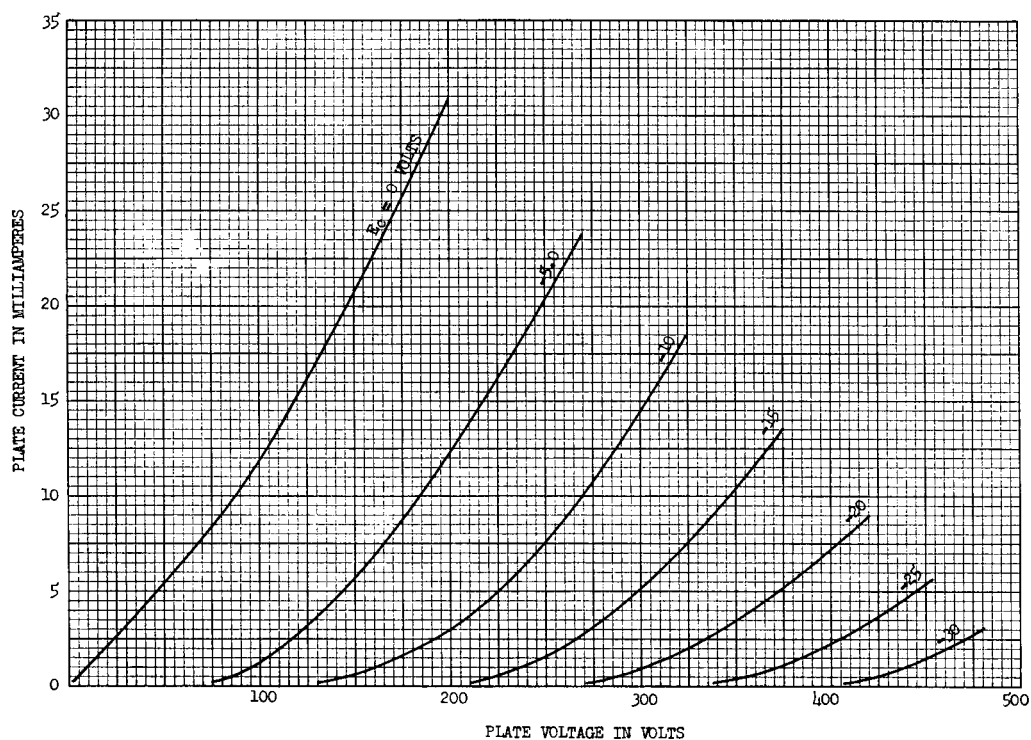
## AVERAGE PLATE CHARACTERISTICS



K-69087-72A522

4-9-52

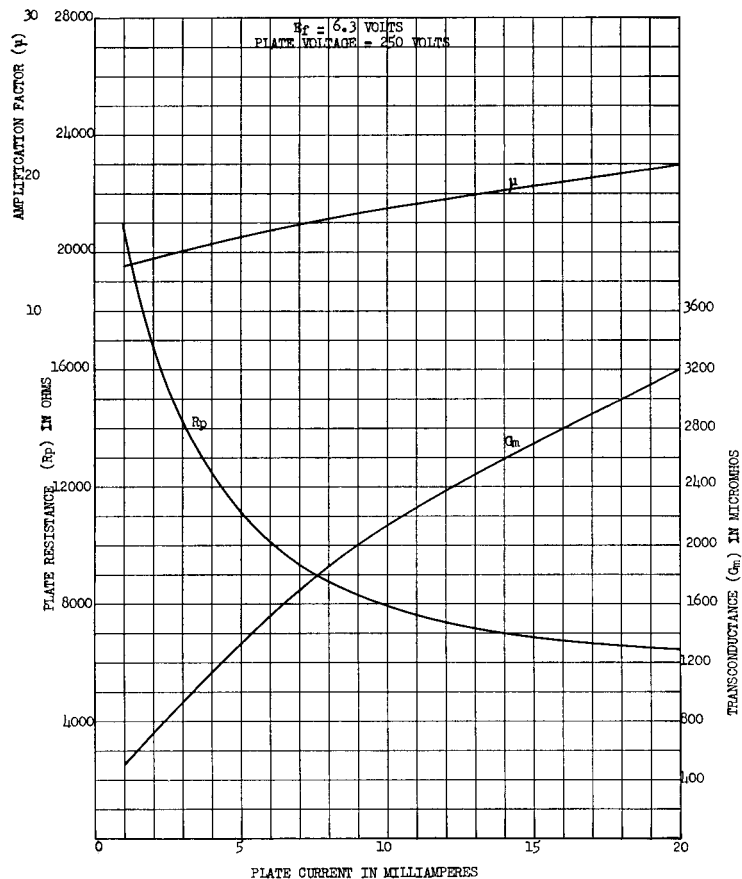
## AVERAGE PLATE CHARACTERISTICS



K-69087-72A519

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AVERAGE CHARACTERISTICS  
PLATE VOLTAGE = 250 VOLTS

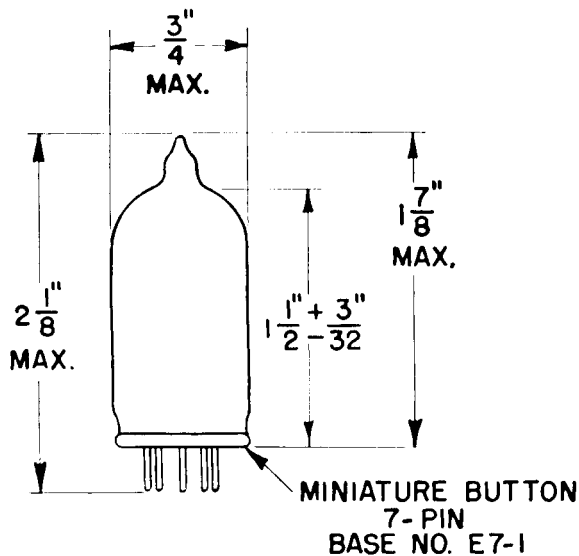


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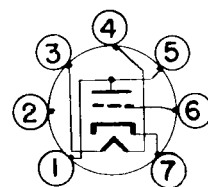
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OUTLINE

BASING DIAGRAM



K-69087-72A518



6BG

- PIN 1: PLATE
- PIN 2: INTERNAL CONNECTION
- PIN 3: HEATER
- PIN 4: HEATER
- PIN 5: PLATE
- PIN 6: GRID
- PIN 7: CATHODE

4-3-52

Tube Department

**GENERAL ELECTRIC**

Schenectady, N. Y.