

## PENTODE

### DESCRIPTION

The GL-6136 is a miniature sharp cutoff pentode for use as a high-gain radio-frequency or intermediate-frequency amplifier. 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	Volts
Heater Current	0.3	Ampere
Direct Interelectrode Capacitances	<b>With Shield*</b>	<b>Without Shield</b>
Grid—No. 1 to Plate, maximum	0.0035	0.0035 uuf
Input	6.5	6.0 uuf
Output	5.5	5.0 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
Suppressor Voltage†.....	0	Volt
Screen Supply Voltage.....	300	Volts
Screen Voltage.....	150	Volts
Positive D-c Grid—No. 1 Voltage.....	0	Volt
Plate Dissipation.....	3.0	Watts
Screen Dissipation.....	0.65	Watt
Heater-Cathode Voltage.....	90	Volts
Mechanical		
Peak Impact Acceleration in Any Direction.....	600	G

CHARACTERISTICS AND TYPICAL OPERATION

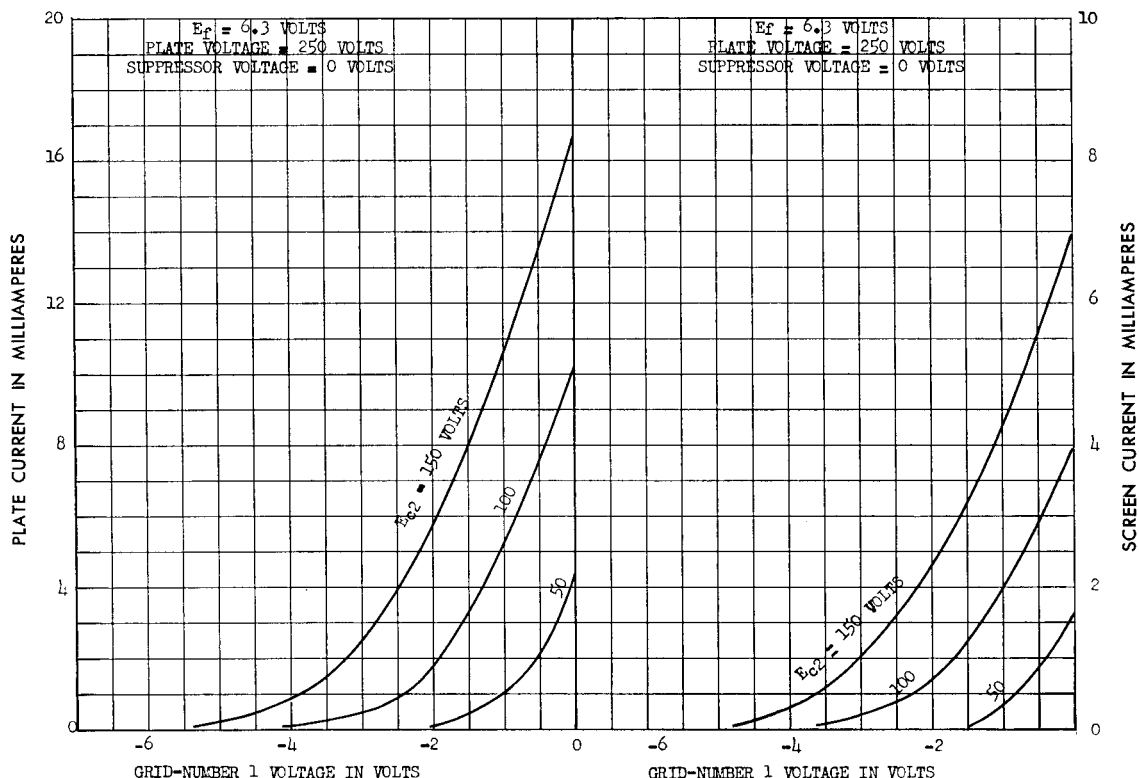
Class A<sub>1</sub> Amplifier

Plate Voltage.....	100	250	Volts
Suppressor Voltage†.....	0	0	Volt
Screen Voltage.....	100	150	Volts
Cathode Bias Resistor.....	150	68	Ohms
Plate Resistance, approximate.....	0.5	1.0	Megohm
Transconductance.....	3900	5200	Micromhos
Plate Current.....	5.0	10.6	Milliamperes
Screen Current.....	2.1	4.3	Milliamperes
Grid—No. 1 Voltage, approximate for I <sub>b</sub> = 10 Microamperes.....	-4.2	-6.5	Volts

\* With external shield No. 316 connected to pin 7.

† Pin 2 connected to pin 7 at socket.

GL-6136  
AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

$E_f = 6.3$  VOLTS

SCREEN VOLTAGE = 150 VOLTS

SUPPRESSOR VOLTAGE = 0 VOLTS

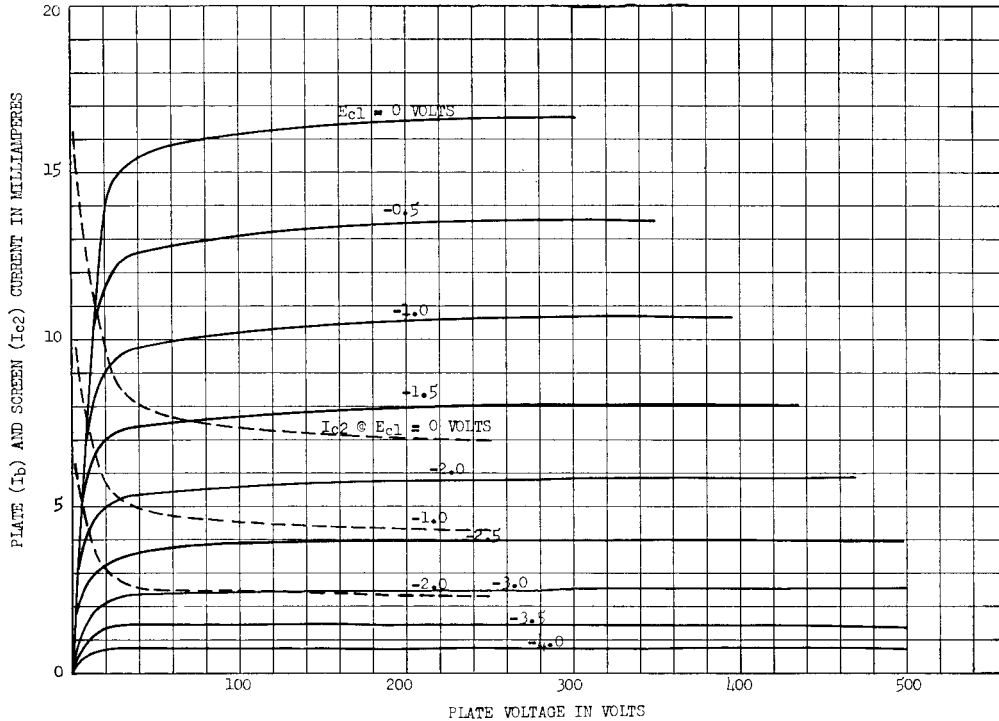
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GL-6136

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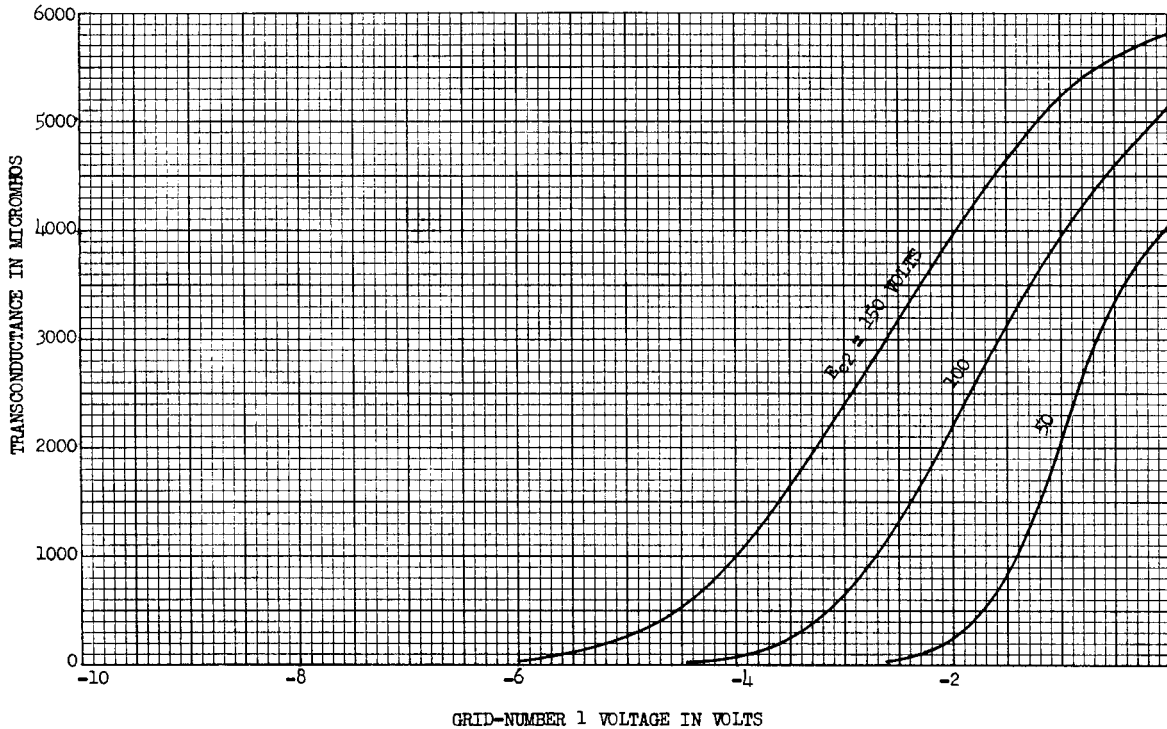
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AVERAGE CHARACTERISTICS

$E_f = 6.3$  VOLTS

PLATE VOLTAGE = 250 VOLTS

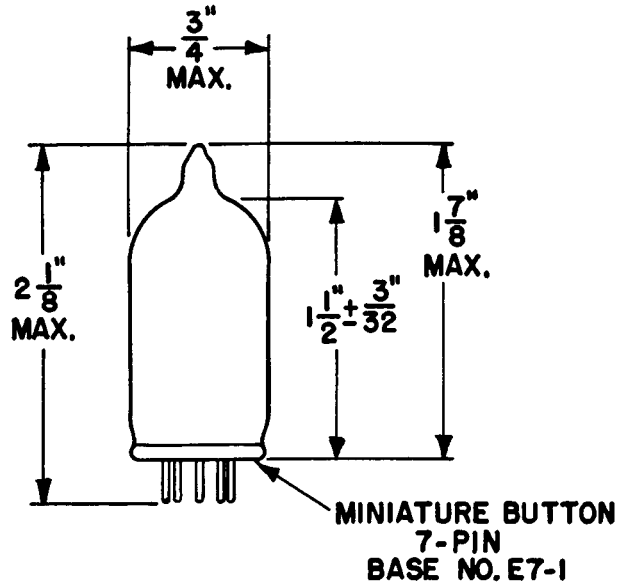
SUPPRESSOR VOLTAGE = 0 VOLTS



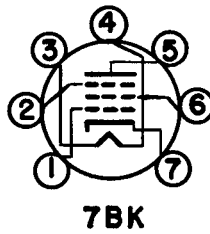
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OUTLINE  
GL-6136



**BASING DIAGRAM**



- PIN 1: GRID NO.1
- PIN 2: GRID NO.3 AND INTERNAL SHIELD
- PIN 3: HEATER
- PIN 4: HEATER
- PIN 5: PLATE
- PIN 6: GRID NO.2 (SCREEN)
- PIN 7: CATHODE

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*Tube Department*

**GENERAL  ELECTRIC**

*Schenectady, N. Y.*