

PENTODE

DESCRIPTION

The GL-6137 is a remote-cutoff pentode designed 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 Capacitance*	
Grid No. 1 to Plate, maximum.....	0.003 uuf
Input.....	5.0 uuf
Output.....	6.5 uuf

Mechanical Data

- Mounting Position—Any
- Envelope—MT-8, Metal Shell
- Base—Small Wafer Octal 8-pin, B8-21



TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

Electrical—Design Center Values		
Plate Voltage.....	300	Volts
Screen Supply Voltage.....	300	Volts
Screen Voltage.....	125	Volts
Positive D-c Grid—No. 1 Voltage.....	0	Volt
Plate Dissipation.....	3.0	Watts
Screen Dissipation.....	0.4	Watt
Heater-cathode Voltage.....	90	Volts
Mechanical		
Peak Impact Acceleration in Any Direction.....	600	G

CHARACTERISTICS AND TYPICAL OPERATION

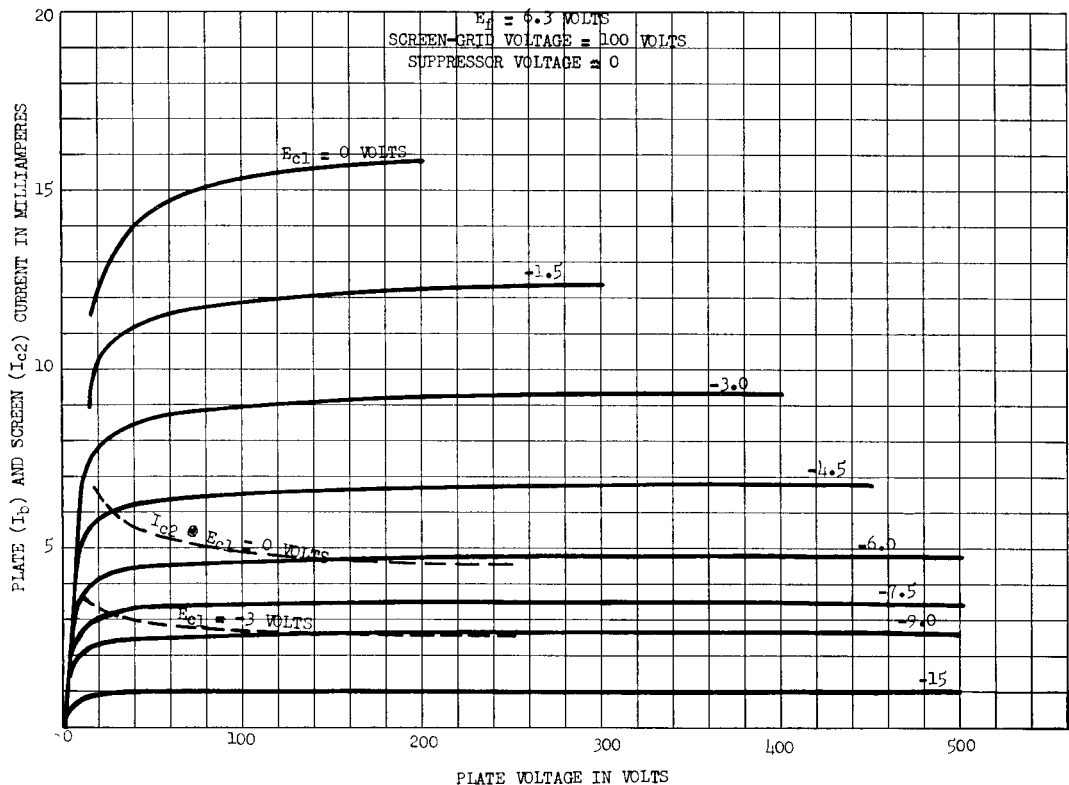
Class A₁ Amplifier

Plate Voltage.....	100	250	Volts
Suppressor Voltage Δ	0	0	Volt
Screen Voltage.....	100	100	Volts
Grid—No. 1 Voltage.....	-1	-3	Volts
Plate Resistance, approximate.....	0.12	0.8	Megohm
Transconductance.....	2350	2000	Micromhos
Plate Current.....	13	9.2	Milliamperes
Screen Current.....	4.0	2.6	Milliamperes
Grid—No. 1 Voltage, approximate for $G_m = 10$ Micromhos.....	-35	-35	Volts

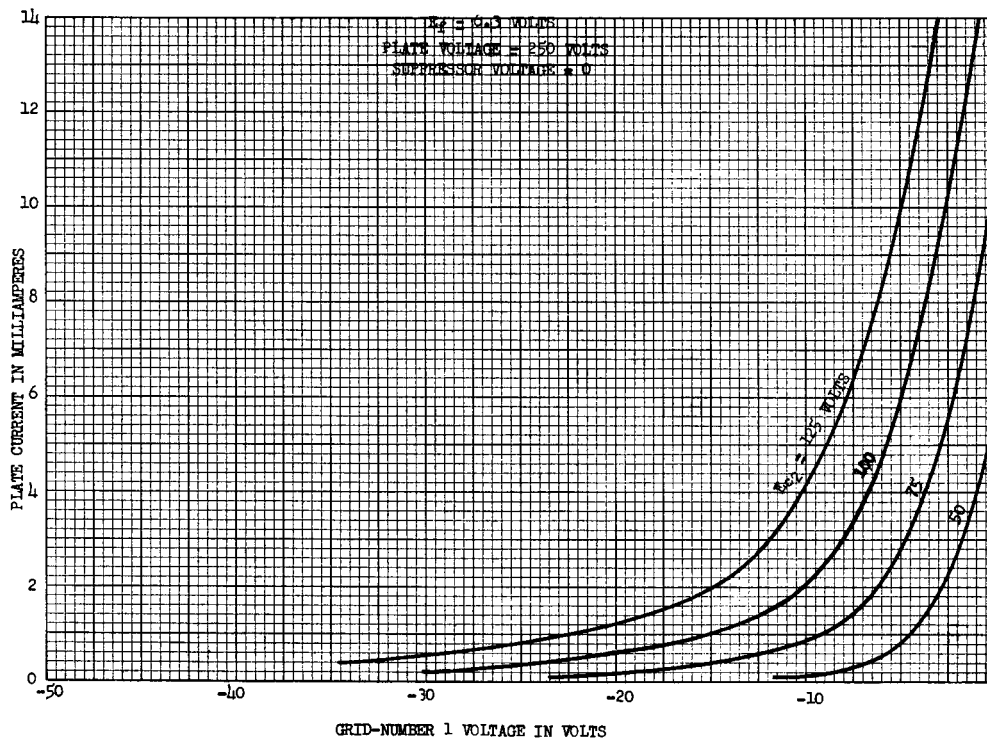
* Measured with Pin 1 connected to Pin 5.

Δ Pin 3 connected to Pin 5 at socket.

AVERAGE PLATE CHARACTERISTICS



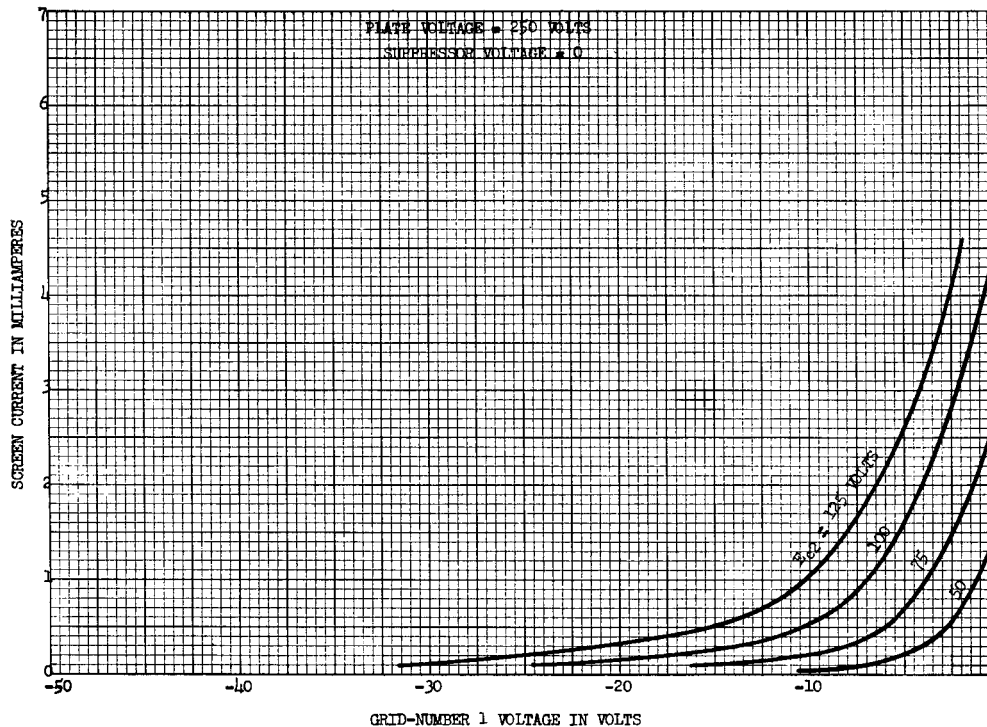
AVERAGE CHARACTERISTICS



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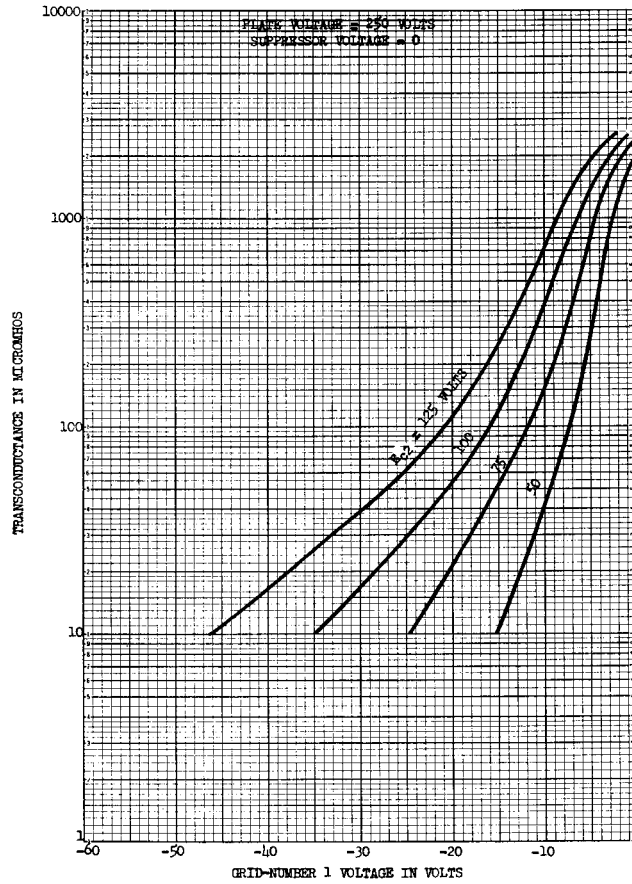
AVERAGE CHARACTERISTICS



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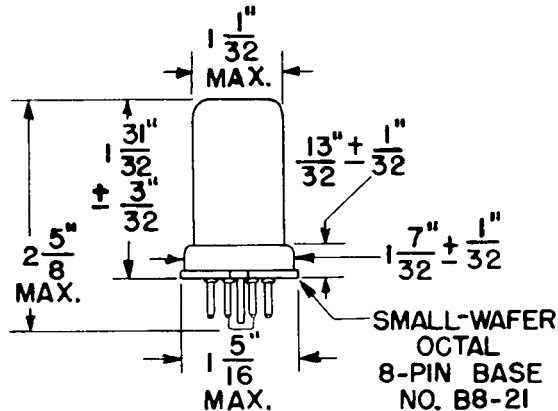
AVERAGE CHARACTERISTICS



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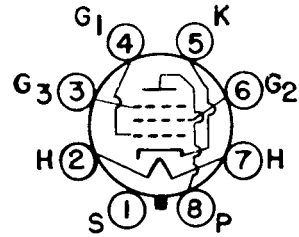
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OUTLINE



N-15119AZ

BASING DIAGRAM



8N

- PIN 1: SHELL
- PIN 2: HEATER
- PIN 3: GRID NO. 3
- PIN 4: GRID NO. 1

- PIN 5: CATHODE
- PIN 6: GRID NO. 2
- PIN 7: HEATER
- PIN 8: PLATE

1-9-52

Tube Department

GENERAL ELECTRIC

Schenectady, N. Y.