

TWIN TRIODE

DESCRIPTION

The GL-5814 is a nine-pin miniature medium-mu tube with two triode sections with individual cathode connections. It is similar in electrical characteristics to the 12AU7 receiving tube. The GL-5814, however, incorporates distinctive me-

chanical design features, and increased heater current which provides a safety factor in cathode performance. These features combine to produce a sturdy shock-resistant tube and one which will give long life under conditions of intermittent operation.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode—Coated Unipotential

	Parallel	Series
Heater voltage.....	6.3	12.6 volts
Heater current.....	0.350	0.175 amperes
Direct interelectrode capacitances†		
Grid to plate (section number 1).....	1.5 uuf	
Grid to plate (section number 2).....	1.5 uuf	
Input (section number 1).....	1.6 uuf	
Input (section number 2).....	1.6 uuf	
Output (section number 1).....	0.50 uuf	
Output (section number 2).....	0.35 uuf	



GENERAL  ELECTRIC

Supersedes ETX-246 dated 5-50

TECHNICAL INFORMATION (CONT'D)

Mechanical Data

Mounting position—Any

Envelope—T-6½ glass

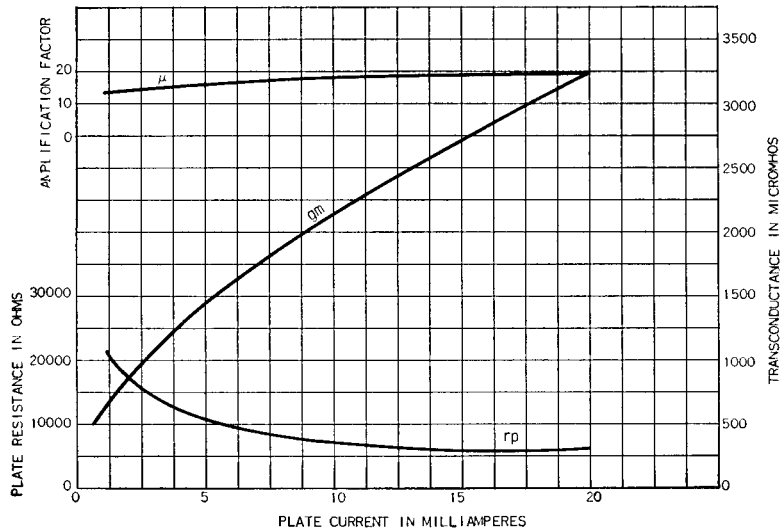
MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Maximum Ratings	Design Center	Absolute
Plate voltage	300	330 volts
Cathode current (each section)	20	22 milliamperes
Plate dissipation (each section)	2.75	3.03 watts
Peak heater-cathode voltage		
Heater negative with respect to cathode	90	100 volts
Heater positive with respect to cathode	90	100 volts
Typical Operation		
Class A1 amplifier (each triode section)		
Plate voltage	100	250 volts
Grid voltage†	0	-8.5 volts
Amplification factor	19.5	17
Plate resistance	6250	7700 ohms
Transconductance	3100	2200 micromhos
Plate current	11.8	10.5 milliamperes

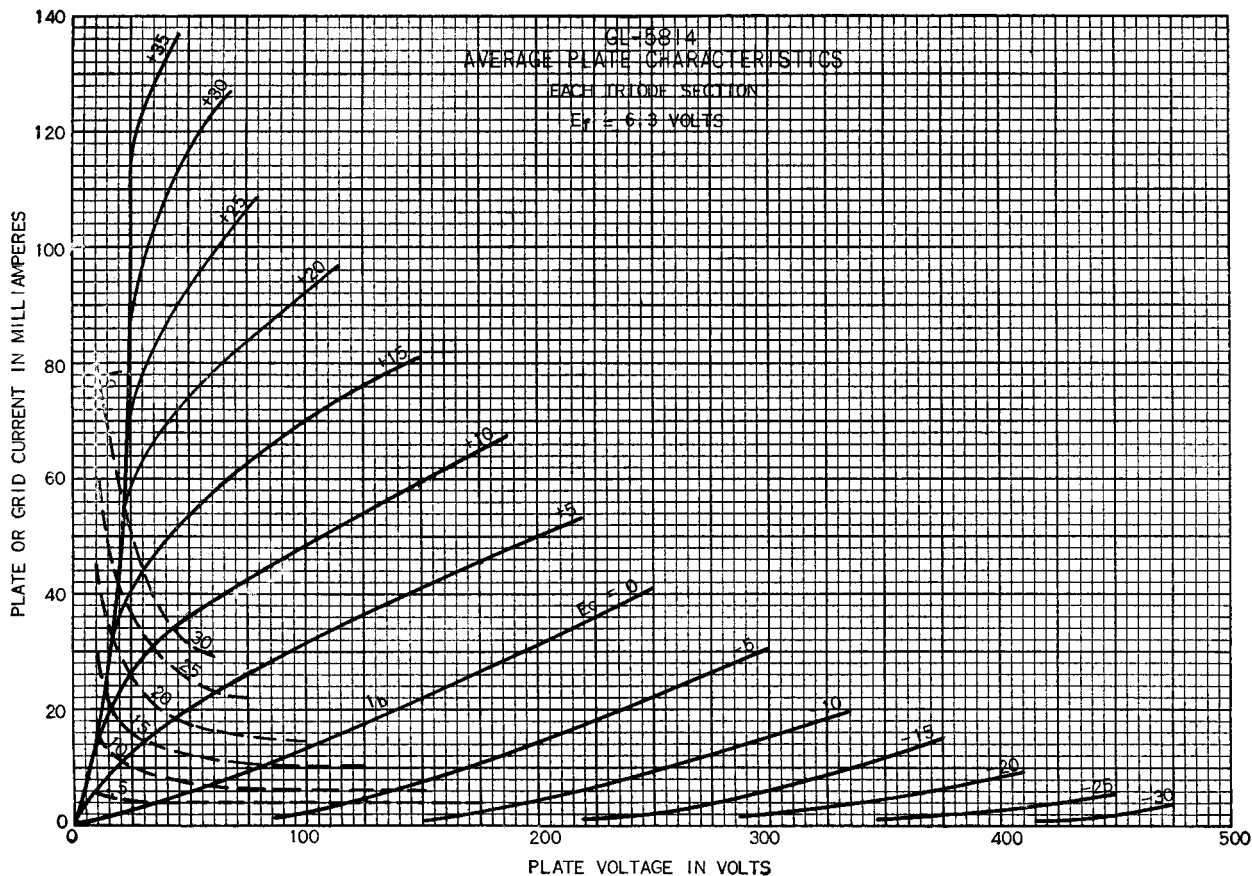
†Measured with no external shield.

‡The d-c resistance in the grid circuit under rated maximum conditions should not exceed 0.25 megohm for fixed-bias operation and 1.0 megohm for cathode-bias operation.

GL-5814
AVERAGE CHARACTERISTICS
 $E_f = 6.3$ VOLTS PLATE VOLTAGE = 250



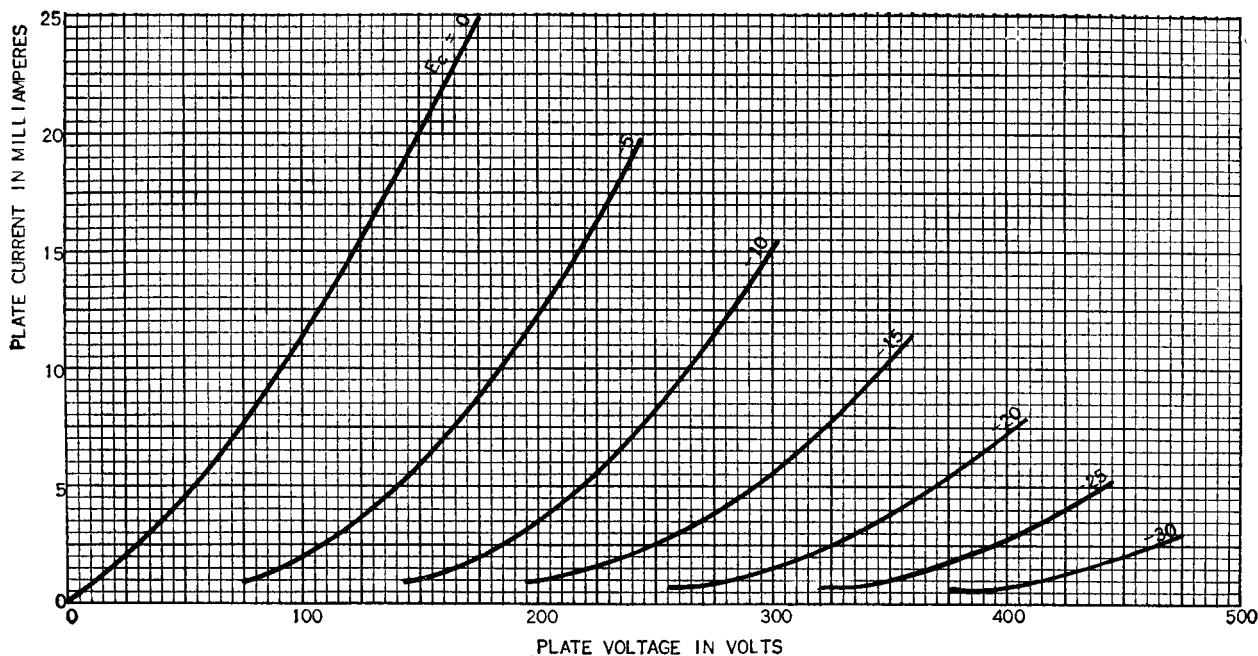
GL-5814
AVERAGE PLATE CHARACTERISTICS
EACH TRIODE SECTION $E_f = 6.3$ VOLTS



K-69087-72A302

8-8-49

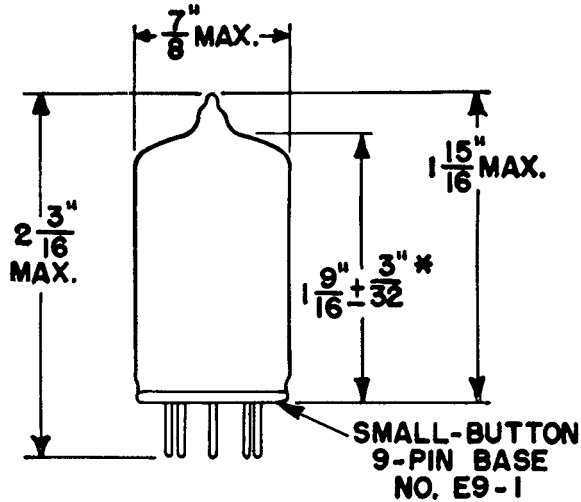
GL-5814
AVERAGE PLATE CHARACTERISTICS
EACH TRIODE SECTION $E_f = 6.3$ VOLTS
HEATERS CONNECTED IN PARALLEL



K-69087-72A304

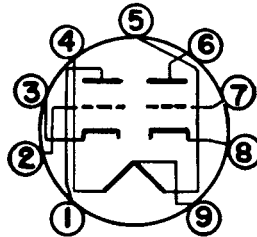
8-8-49

OUTLINE
PLIOTRON GL-5814



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

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**

N-15155AZ

8-10-49

Tube Department

GENERAL  ELECTRIC

Schenectady, N. Y.