DESCRIPTION AND RATING

PLIOTRON GL-6046

The GL-6046 is a beam power amplifier intended for use in industrial applications which require relatively high plate currents at low plate and screen supply voltages. The GL-6046 is designed to maintain its emission capabilities after long periods of non-conduction. In addition the control grid is specially treated to minimize grid emission. The tube is electrically and physically a replacement for the 25L6-GT.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode - Coated Unipotential

Heater Voltage (A-c or D-c)	25.0	Volts
Heater Current	0.30	Ampere

Mechanical Data

Mounting Position - Any
Envelope - T-9 Glass
Base - Intermediate Shell Octal 7-Pin, B7-7

MAXIMUM RATINGS Design Center Values

Plate Voltage	200	Volts
Screen Voltage	125	Volts
Plate Dissipation	10	Watts
Screen Dissipation	1.5	Watts
Peak Heater-Cathode Voltage	150	Volts

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier

Heater Voltage (A-c or D-c)	25	25	Volts
Plate Voltage	110	200	Volts
Screen Voltage	110	125	Volts
Grid-No. 1 Voltage*	-7.5	---	Volts
Cathode Bias Resistor	---	180	Ohms
Peak A-f Grid-No. 1 Voltage	7.5	8.5	Volts
Plate Resistance, approximate	13,000	28,000	Ohms
Transconductance	8,000	8,000	Micromhos
Zero-Signal Plate Current	49	46	Milliamperes
Maximum-Signal Plate Current	50	47	Milliamperes
Zero-Signal Screen Current	4.0	2.2	Milliamperes
Maximum-Signal Screen Current	10.0	8.5	Milliamperes
Load Resistance	2,000	4,000	Ohms
Total Harmonic Distortion, approximate	10	10	Percent
Power Output	2.1	3.8	Watts

Relay Energizer

Heater Voltage (A-c or D-c)**	23	Volts
Plate Supply Voltage	115	Volts
Screen Supply Voltage	115	Volts

from RTMA release #989, July, 20, 1951

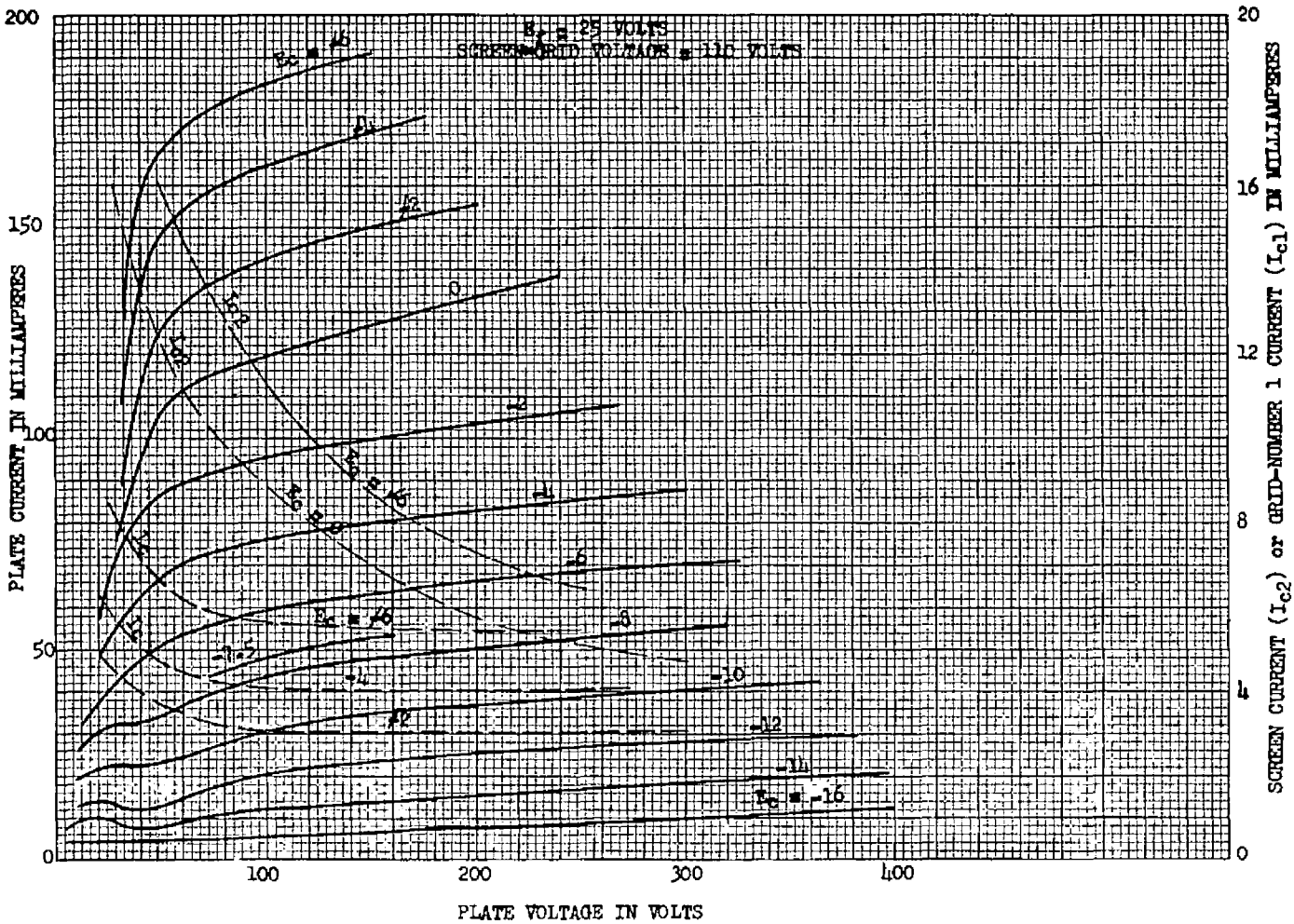
CHARACTERISTICS AND TYPICAL OPERATION (CONT'D)

Relay Energizer

Plate Load Resistor	500	Ohms
Screen Resistor	1000	Ohms
Grid-No. 1 Circuit Resistance	2	Megohms
Grid-No. 1 Bias Voltage	0	Volt
Plate Current	105	Milliamperes
Screen Current	12.8	Milliamperes
Plate Current for Ec_1 = -25 Volts, approximate	0.1	Milliampere

* The D-c resistance in the grid circuit, under rated maximum conditions, should not exceed 0.1 megohm for fixed-bias operation and 0.5 megohm for cathode-bias operation.

** Five tubes in series across 115-volt supply.



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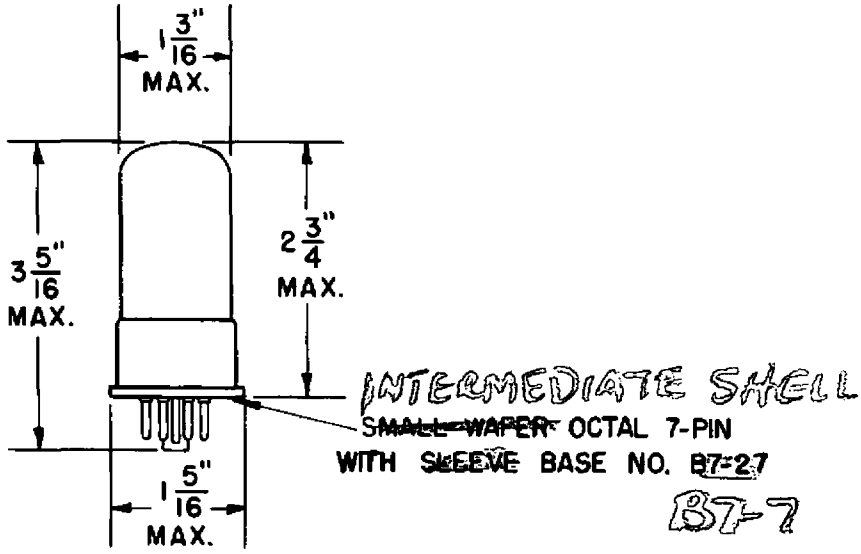
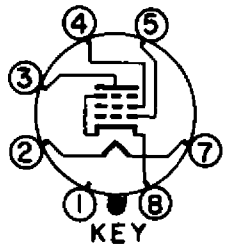
May 15, 1951

GL-6046

AVERAGE PLATE CHARACTERISTICS
E_f = 25 VOLTS
SCREEN-GRID VOLTAGE = 110 VOLTS



BASING DIAGRAM



7AC

PIN 1: ~~BASE SLEEVE~~ NO CONNECTION
PIN 2: HEATER
PIN 3: PLATE
PIN 4: GRID NO. 2 (SCREEN)
PIN 5: GRID NUMBER 1
PIN 7: HEATER
PIN 8: CATHODE AND BEAM PLATES

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May 15, 1951

OUTLINE
GL-6046

GENERAL ELECTRIC
ELECTRONICS DEPARTMENT, TUBE DIVISIONS
SCHENECTADY, NEW YORK

5-51 (1M)