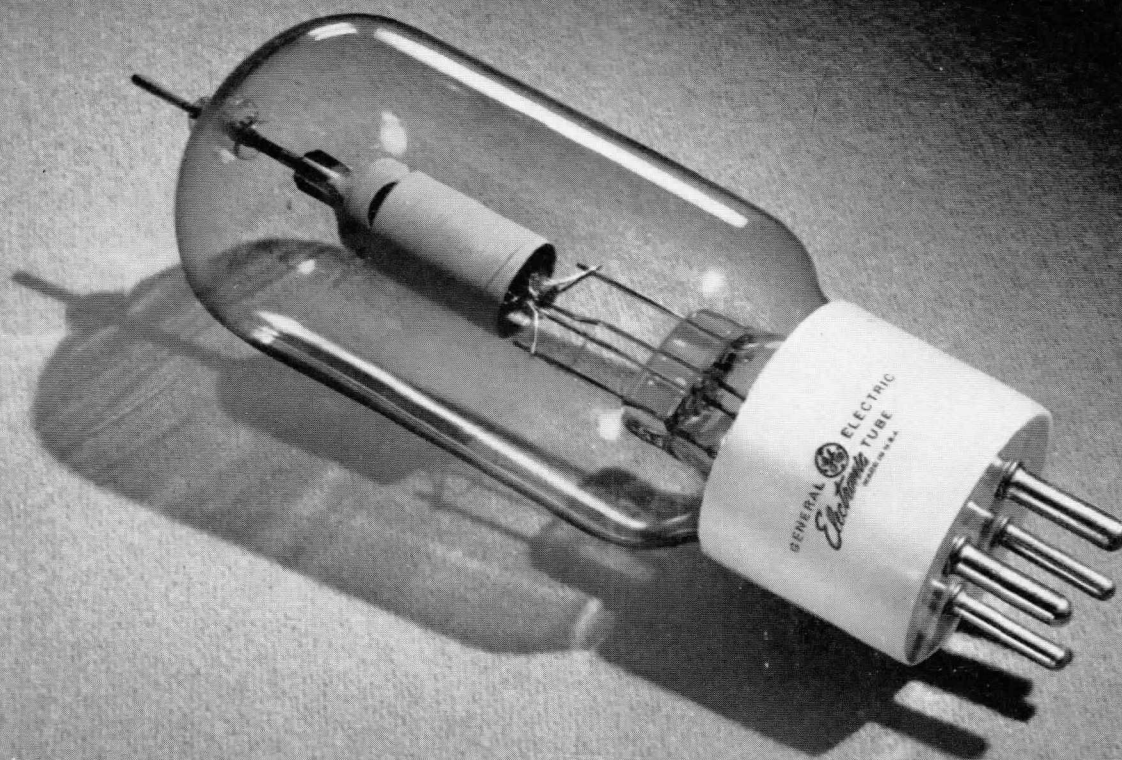




TRIODE

DESCRIPTION

The GL-35T is a three-electrode high-mu tube designed for use in Class B or C operation. The anode is capable of dissipating 50 watts, and cooling is accomplished by radiation. The cathode is a thoriated-tungsten filament. Maximum ratings apply up to 100 megacycles.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL

Number of electrodes.....3

Electrical Data

Filament voltage.....5.0 volts

Filament current.....4.0 amperes

Amplification factor.....39

Interelectrode capacitances

Grid-plate.....1.8 micromicrofarad

Grid-filament.....4.1 micromicrofarads

Plate-filament.....0.3 micromicrofarad

Transconductance, $I_b = 100$ ma, $E_b = 2000$ v, $E_c = -30$ v.....2850 micromhos

Frequency for maximum ratings.....100 megacycles

Mechanical Data

Net weight, approximate.....2.5 ounces



GENERAL  ELECTRIC

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

AUDIO-FREQUENCY POWER AMPLIFIER AND MODULATOR—CLASS B

Maximum Ratings, Absolute Values

D-c plate voltage.....	2000 maximum	volts
Maximum signal d-c plate current†.....	150 maximum	milliamperes
Plate dissipation‡.....	50 maximum	watts

Typical Operation

Unless otherwise specified, values are for two tubes

D-c plate voltage.....	1000	1500	2000	volts
D-c grid voltage.....	-8	-25	-40	volts
Peak a-f grid input voltage.....	240	250	255	volts
Zero signal d-c plate current.....	67	45	34	milliamperes
Maximum signal d-c plate current.....	240	200	167	milliamperes
Effective load resistance, plate to plate.....	7900	16200	27500	ohms
Maximum signal driving power, approximate.....	7	5	4	watts
Maximum signal power output, approximate.....	140	200	235	watts

PLATE-MODULATED RADIO-FREQUENCY POWER AMPLIFIER—CLASS C TELEPHONY

Carrier conditions per tube for use with a maximum modulation factor of 1.0

Maximum Ratings, Absolute Values

D-c plate voltage.....	2000 maximum	volts
D-c plate current.....	100 maximum	milliamperes
D-c grid current.....	50 maximum	milliamperes
Plate dissipation.....	34 maximum	watts

Typical Operation

D-c plate voltage.....	1000	1500	2000	volts
D-c grid voltage.....	-130	-150	-150	volts
Peak r-f grid voltage.....	260	278	270	volts
D-c plate current.....	90	90	84	milliamperes
D-c grid current, approximate.....	31	26	23	milliamperes
Plate dissipation.....	25	31	33	watts
Driving power, approximate.....	8	7	6	watts
Plate input.....	90	135	168	watts
Power output, approximate.....	65	104	135	watts

RADIO-FREQUENCY POWER AMPLIFIER AND OSCILLATOR—CLASS C TELEGRAPHY

Key-down conditions per tube without modulation¶

Maximum Ratings, Absolute Values

D-c plate voltage.....	2000 maximum	volts
D-c plate current.....	150 maximum	milliamperes
D-c grid current.....	50 maximum	milliamperes
Plate dissipation.....	50 maximum	watts

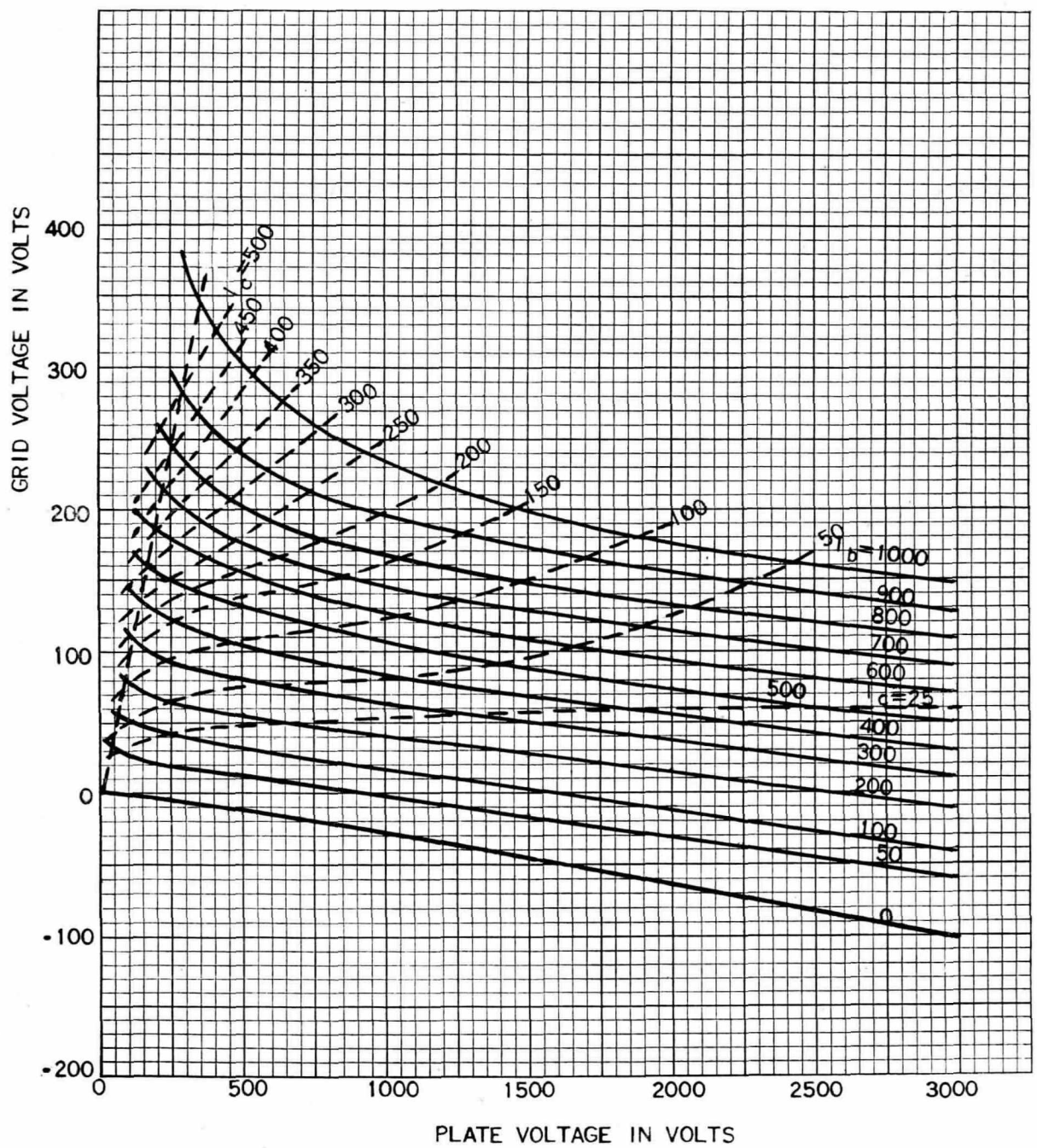
Typical Operation

D-c plate voltage.....	1000	1500	2000	volts
D-c grid voltage.....	-60	-120	-135	volts
Peak r-f grid input voltage.....	165	250	285	volts
D-c plate current.....	125	125	125	milliamperes
D-c grid current, approximate.....	40	40	45	milliamperes
Plate dissipation.....	38	47	50	watts
Driving power, approximate.....	7	9	13	watts
Plate input.....	125	188	250	watts
Power output, approximate.....	87	141	200	watts

†Averaged over any audio-frequency cycle of sine-wave form.

¶Modulation essentially negative may be used if the positive peak of the envelope does not exceed 115 per cent of the carrier conditions.

GL-35T
CONSTANT-CURRENT CHARACTERISTICS

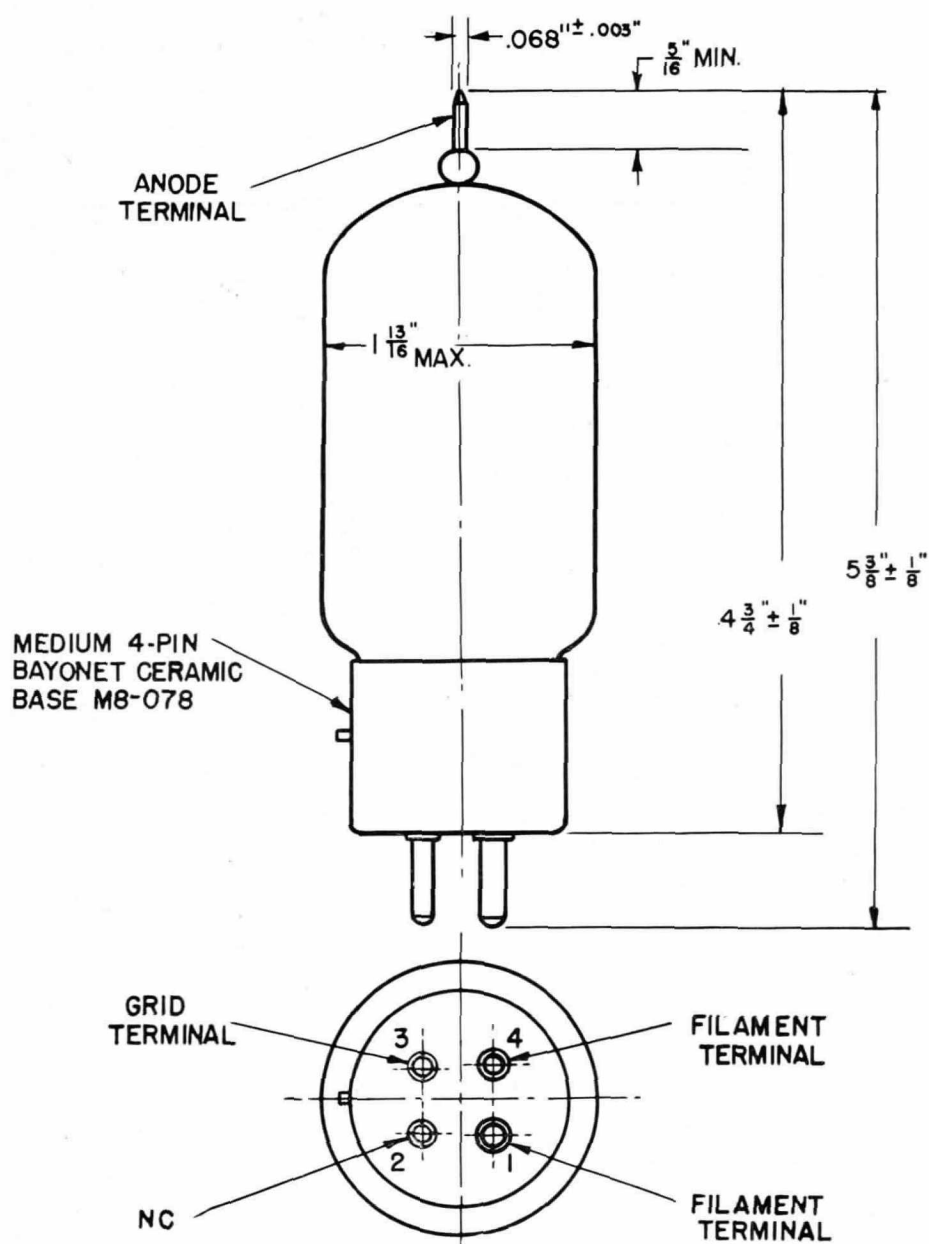


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GL-35T OUTLINE

N-15087AZ

10-9-46

Electronics Department
GENERAL ELECTRIC
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