DESCRIPTION
The GL-8002 is a three-electrode transmitting tube designed for use as a radio-frequency power amplifier at high frequencies. Multiple leads for both the filament and grid connectors minimize the inductance to these electrodes. Maximum ratings may be used up to a frequency of 150 megacycles and reduced ratings up to 300 megacycles.

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

GENERAL CHARACTERISTICS
Number of electrodes ........................................... 3

Electrical
Cathode—Filamentary
Filament voltage ............................................. 16 volts
Filament current ............................................. 38 amperes
Direct interelectrode capacitances, approx
Plate to grid .................................................. 8.7 micromicrofarads
Grid to filament ........................................... 10.2 micromicrofarads
Plate to filament ......................................... 0.90 micromicrofarad

Mechanical
Type of cooling ............................................ Water and forced air
Operating position ....................................... Vertical, anode down

GENERAL ELECTRIC
MAXIMUM RATINGS

CLASS B RADIO-FREQUENCY POWER AMPLIFIER
Carrier conditions per tube for use with a maximum modulation factor of 1.0
D-c plate voltage ........................................ 3500 volts
D-c plate current ......................................... 0.6 ampere
Plate input .................................................. 1800 watts
Plate dissipation .......................................... 1200 watts

CLASS C RADIO-FREQUENCY POWER AMPLIFIER AND OSCILLATOR, PLATE MODULATED
Carrier conditions per tube for use with a maximum modulation factor of 1.0
D-c plate voltage ........................................ 2500 volts
D-c grid voltage .......................................... -500 volts
D-c plate current ......................................... 0.5 ampere
D-c grid current .......................................... 0.1 ampere
Plate input .................................................. 1250 watts
Plate dissipation .......................................... 750 watts

CLASS C RADIO-FREQUENCY AMPLIFIER AND OSCILLATOR, TELEGRAPHY
Key-down conditions per tube without modulation. Essentially negative modulation may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.
D-c plate voltage ........................................ 3500 volts
D-c grid voltage .......................................... -500 volts
D-c plate current ......................................... 1.0 ampere
D-c grid current .......................................... 0.1 ampere
Plate input .................................................. 3000 watts
Plate dissipation .......................................... 1200 watts

GL-8002 AVERAGE PLATE CHARACTERISTICS
(E<sub>c</sub>=16.0 VOLTS A-C)
\[ E_c = E_b \]

**GRID CURRENT IN AMPERES**

**PLATE VOLTAGE IN KILO VolTS**

GL-8002 TYPICAL GRID-PLATE TRANSFER CHARACTERISTICS

\( E_i = 16.0 \) VOLTS A-C

2-28-45
FILAMENT TERMINAL

CENTER FILAMENT TERMINAL

INDEX BOSS

GRID TERMINAL

6 TERMINALS EQUALLY SPACED

.156±.002" DIA.

.344±.025"
STRAIGHT SIDE

.125±.002" DIA.

1 15" MAX.
16 DIA.

11" MAX.
2 DIA.

1.500±.008"
DIA.

1.125±.010"
DIA.

ANODE

OUTLINE
GL-8002 PLIOTRON

Electronics Department
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K-6912329

9-26-44