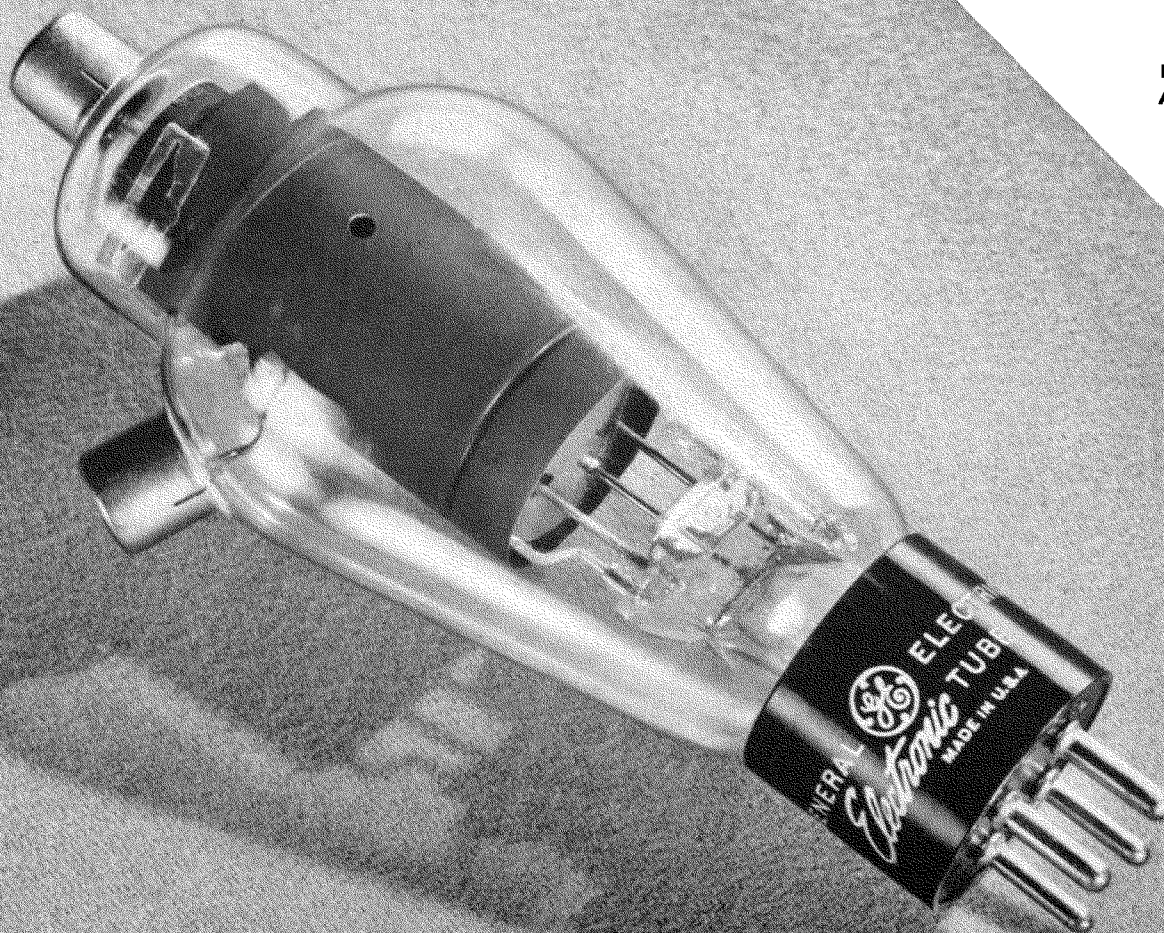




THYRATRON

DESCRIPTION

The FG-97 is a mercury-vapor double-grid thyatron designed for applications where the available grid power is very small and where it is desired

to actuate the grid from a high-impedance source. It may be used in applications where the tube temperature can be maintained relatively constant.

TECHNICAL INFORMATION

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

GENERAL CHARACTERISTICS

Number of electrodes 4

Electrical

Cathode—Filamentary type

Filament voltage 2.5 volts

Filament current, approx 5.0 amperes

Filament heating time, typical 5 seconds

Peak voltage drop, typical 16 volts

Approximate control characteristics

Anode voltage 100 1000 volts

Shield-grid voltage 0 0 volts

Control-grid voltage +0.5 -13.0 volts

Anode to control-grid capacitance, approx 0.3 micromicrofarad

Ionization time, approx 10 microseconds

Deionization time, approx 1000 microseconds



GENERAL  ELECTRIC

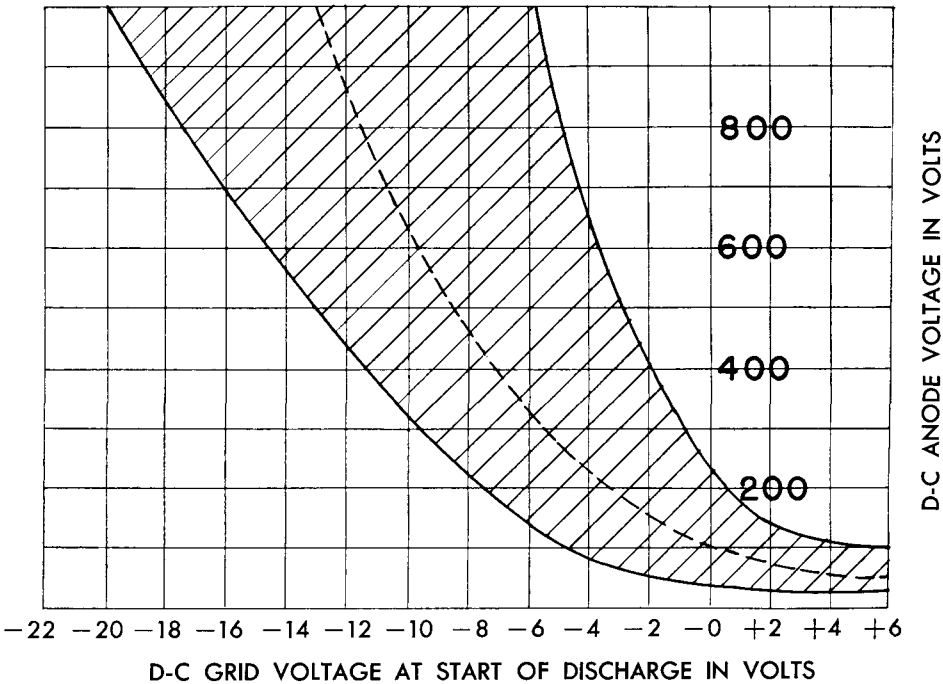
TECHNICAL INFORMATION (CONT'D)

Mechanical

Net weight, approx.....	5 ounces
Shipping weight, approx.....	4 pounds
Operating position.....	vertical, base down

MAXIMUM RATINGS

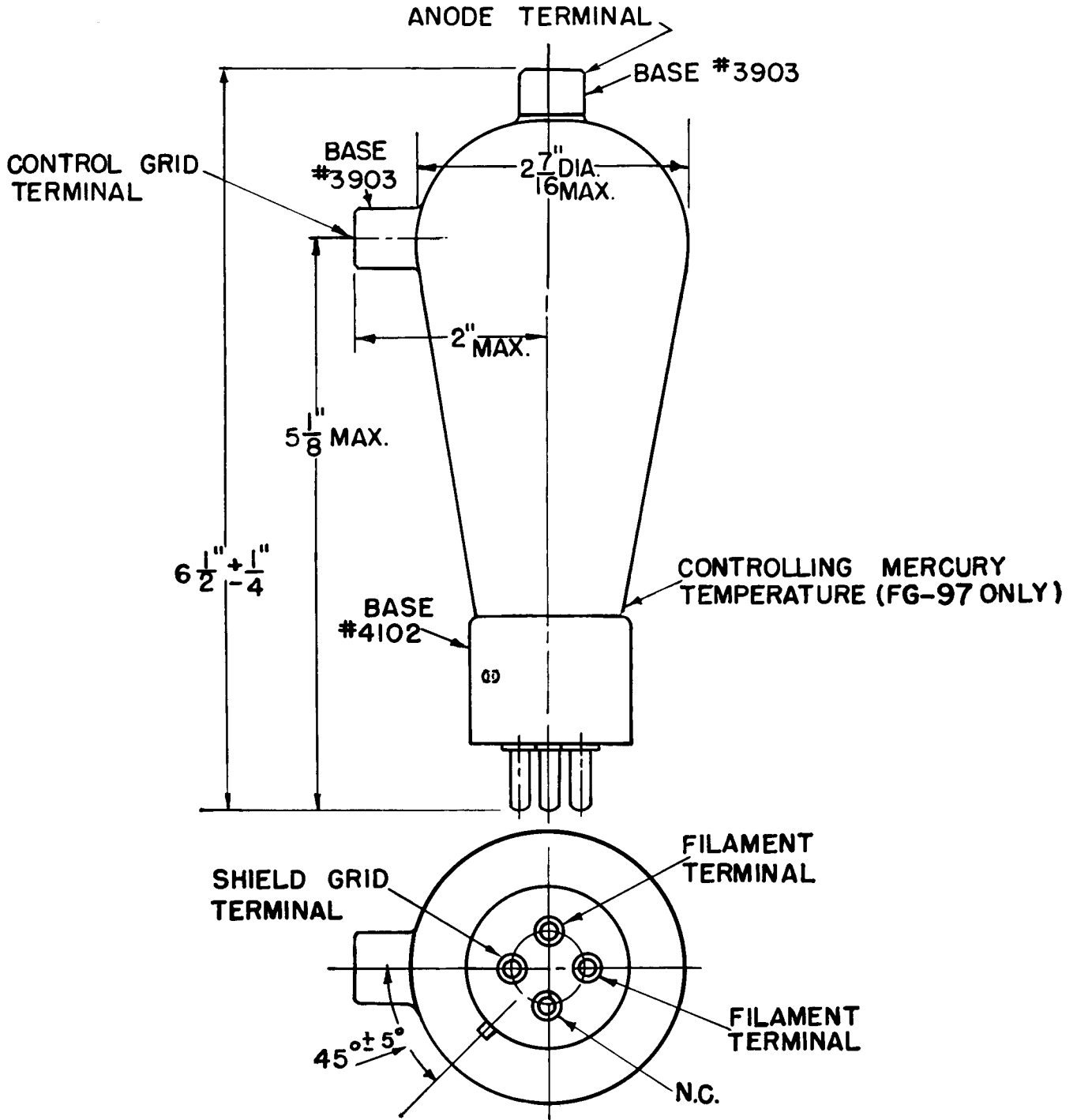
Maximum peak anode voltage	
Inverse.....	1000 volts
Forward.....	1000 volts
Maximum negative control-grid voltage	
Before conduction.....	1000 volts
During conduction.....	10 volts
Maximum negative shield-grid voltage	
Before conduction.....	300 volts
During conduction.....	5 volts
Maximum anode current	
Instantaneous, 25 cycles and above.....	2.0 amperes
Instantaneous, below 25 cycles.....	1.0 ampere
Average.....	0.5 ampere
Surge, for design only.....	40 amperes
Duration of surge current.....	0.1 second
Maximum control-grid current	
Instantaneous.....	0.25 ampere
Average.....	0.05 ampere
Maximum shield-grid current	
Instantaneous.....	0.25 ampere
Average.....	0.05 ampere
Maximum time of averaging current.....	15 seconds
Temperature limits, condensed mercury.....	+40 to +80 centigrade
Recommended temperature, condensed mercury.....	40 centigrade



K-8639317

11-13-44

THYRATRON FG-97
TYPICAL CONTROL CHARACTERISTICS
SHADED AREA SHOWS RANGE OF CHARACTERISTICS
CONDENSED MERCURY TEMPERATURE 40 C
SHIELD GRID VOLTAGE ZERO



K-4955906

11-29-44

