THYRATRON

DESCRIPTION

The FG-97 is a mercury-vapor double-grid thyratron 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

GE Electronic TUBE

GENERAL ELECTRIC

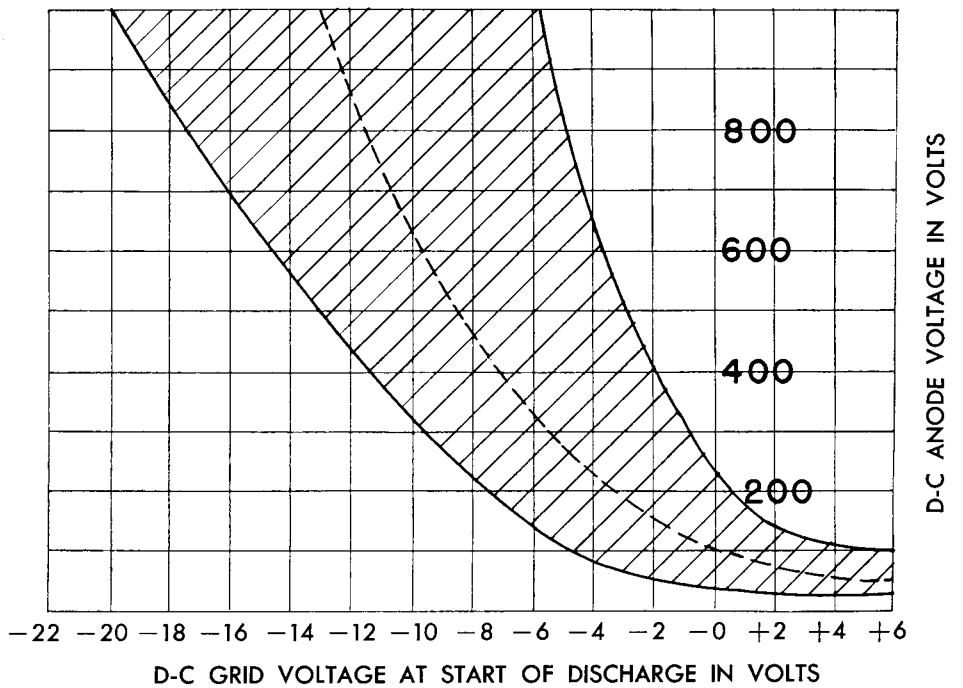
TECHNICAL INFORMATION (CONT'D)

Mechanical

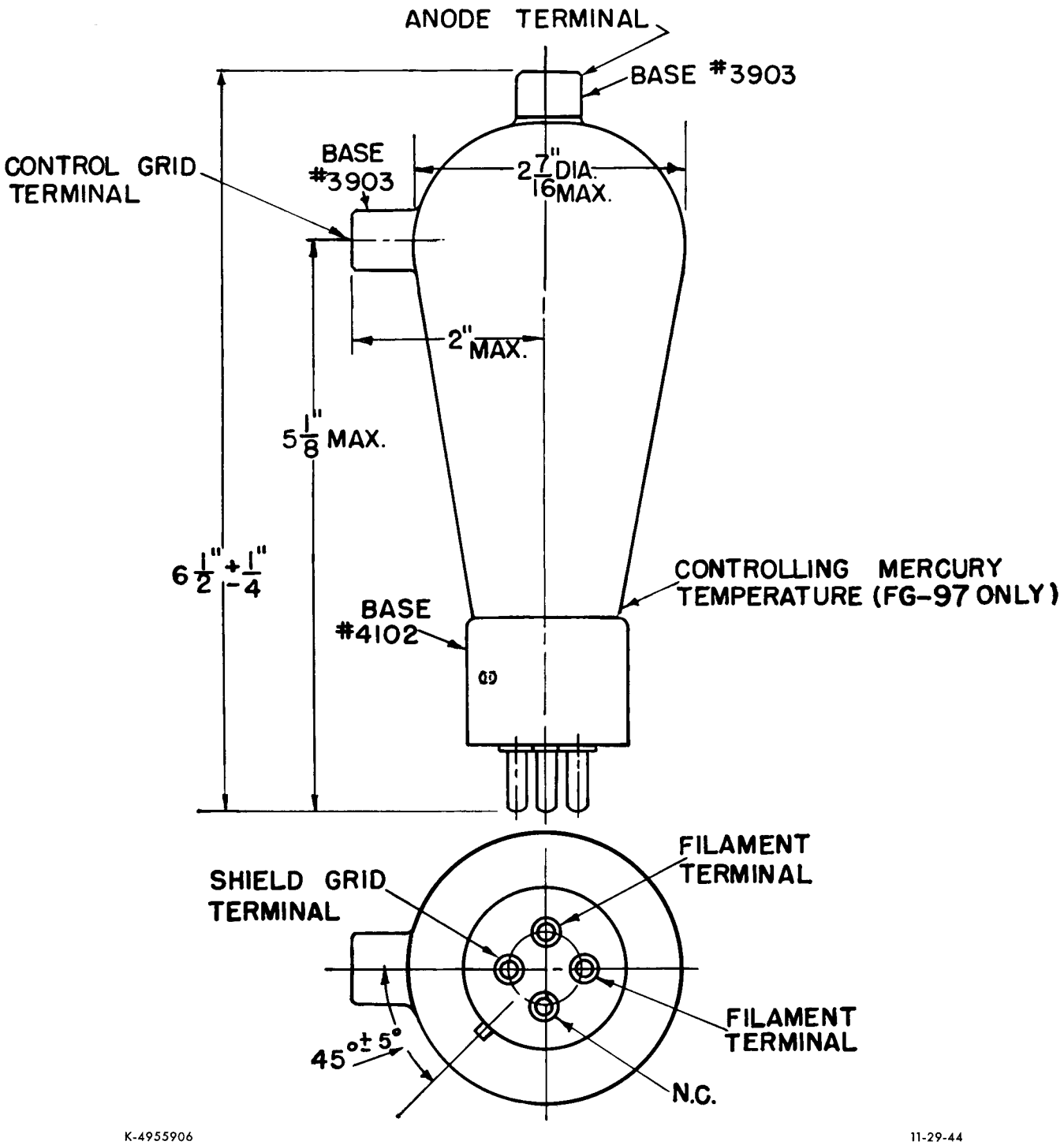
Net weight, approx	5	ounces
Shipping weight, approx	4	pounds
Operating position		vertical, base down

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



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



OUTLINE
FG-97 THYRATRON

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4-45 (4M)
Filing No. 8850