



THYRATRON

DESCRIPTION

The FG-95 is a double-grid mercury-vapor thyatron for use in 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—Indirectly heated type

Voltage	5.5*	5.0 volts
Current, approx	5.0*	4.5 amperes
Heating time, typical		5 minutes

Peak voltage drop, typical 16 volts

Approximate control characteristics

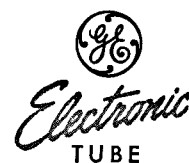
Anode voltage	100	1000 volts
Shield-grid voltage	0	0 volts
Control-grid voltage	+1.0	—9.0 volts

Anode to control grid capacitance, approx 0.2 micromicrofarad

Ionization time, approx 10 microseconds

Deionization time, approx 1000 microseconds

**These ratings apply only when the tube is used for ignitor firing.*



GENERAL  ELECTRIC

TECHNICAL INFORMATION (CONT'D)

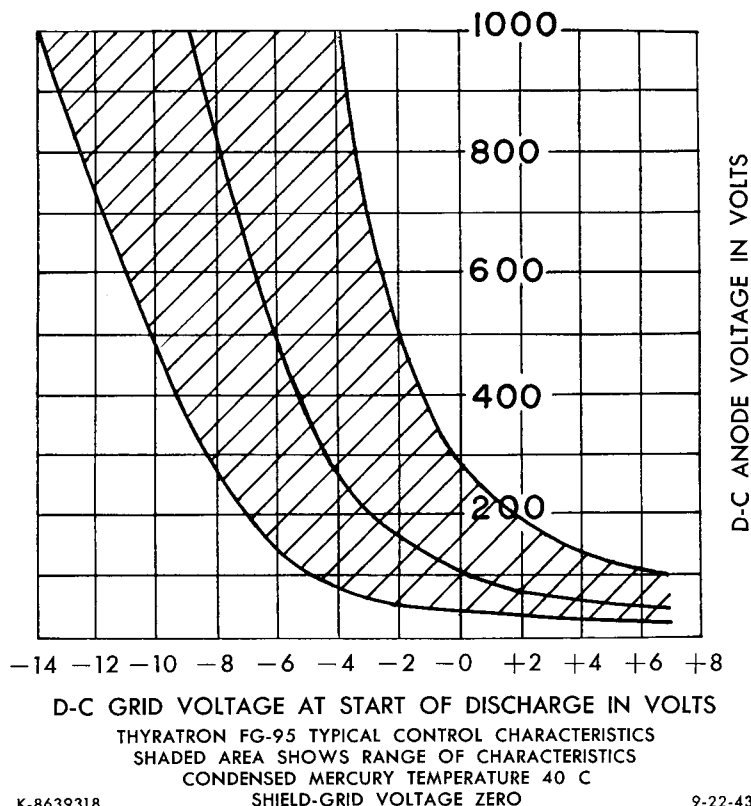
Mechanical

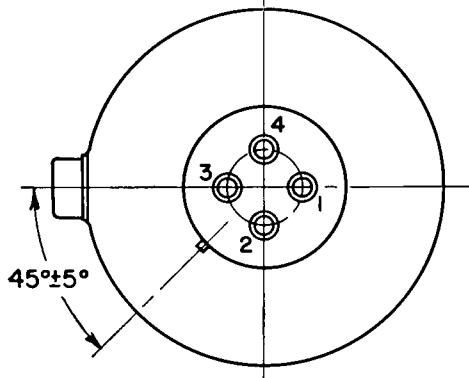
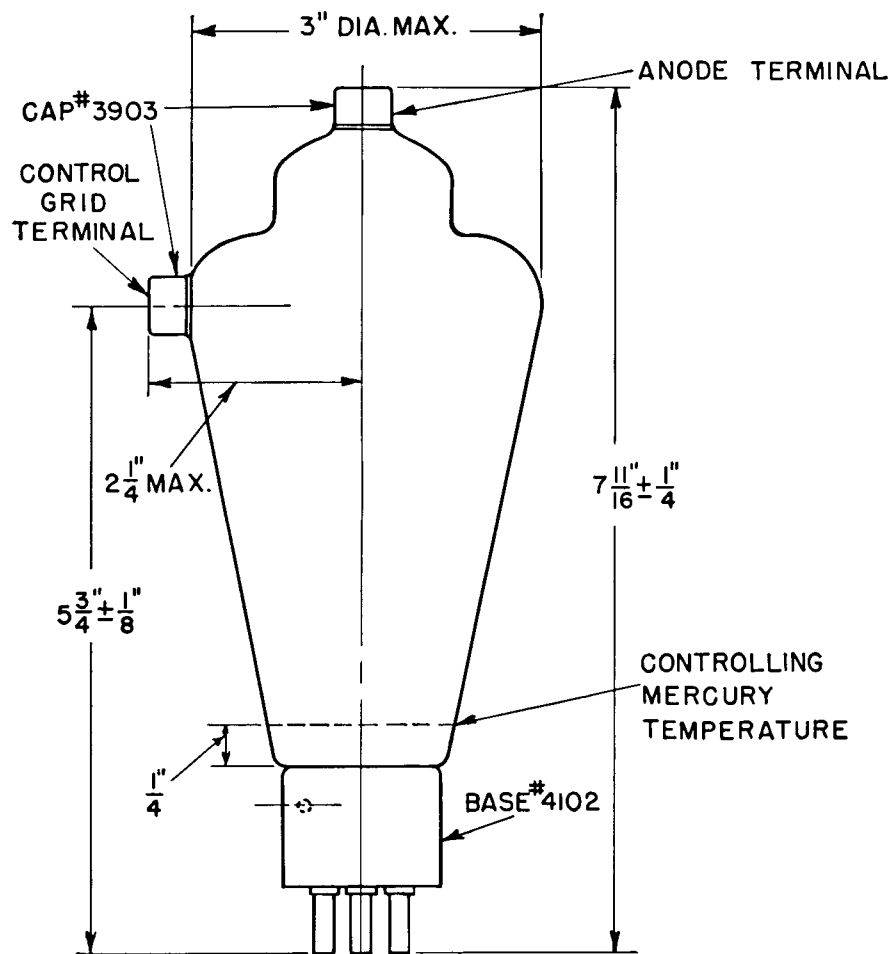
Net weight, approx.	5 ounces
Shipping weight, approx.	7 pounds
Operating position	vertical, base down

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	30*	15 amperes
Instantaneous, below 25 cycles		5.0 amperes
Average	0.5*	2.5 amperes
Surge, for design only		200 amperes
Duration of surge current		0.1 second
Maximum control-grid current		
Instantaneous	1.0	ampere
Average	0.25	ampere
Maximum shield-grid current		
Instantaneous	1.0	ampere
Average	0.25	ampere
Maximum time of averaging current		15 seconds
Temperature limits, condensed mercury	+40 to +80	centigrade
Recommended temperature, condensed mercury	40	centigrade

*These ratings apply only when the FG-95 is used for ignitor firing.





PIN	FG-95
1	HEATER
2	CATHODE, GRID & ANODE RETURN
3	SHIELD GRID
4	CATHODE & HEATER

K-4955907

8-18-44

OUTLINE
FG-95 THYRATRON

Electronics Department
GENERAL ELECTRIC
Schenectady, N. Y.