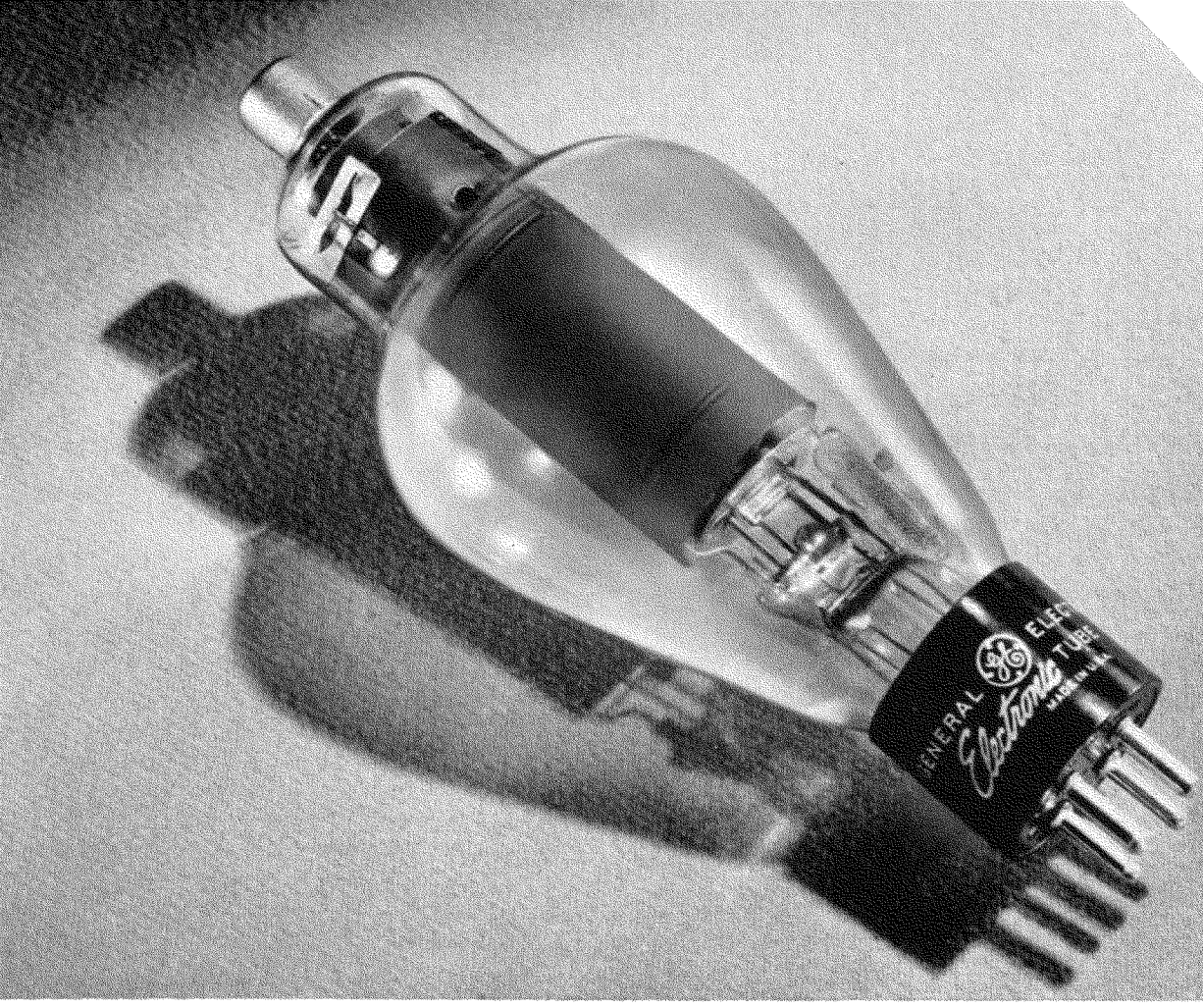

THYRATRON

DESCRIPTION

The FG-57 is a negative-control mercury-vapor tube for use where it is desired to actuate the tube with a change in negative grid voltage. It requires relatively little grid power and is suitable for use in relay circuits where current flow is desired in the absence of grid excitation.

TECHNICAL INFORMATION

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

GENERAL CHARACTERISTICS

Number of electrodes				3
Electrical				
Cathode—Indirectly heated type				
Voltage				5.0 volts
Current, approx				4.5 amperes
Heating time, typical				5 minutes
Peak voltage drop, typical				16 volts
Approximate control characteristics				
Anode voltage	60	100	1000	volts
Grid voltage	0	−1.75	−6.5	volts
Anode to grid capacitance, approx				4.4 micromicrofarads
Ionization time, approx				10 microseconds
Deionization time, approx				1000 microseconds

GE Electronic TUBE

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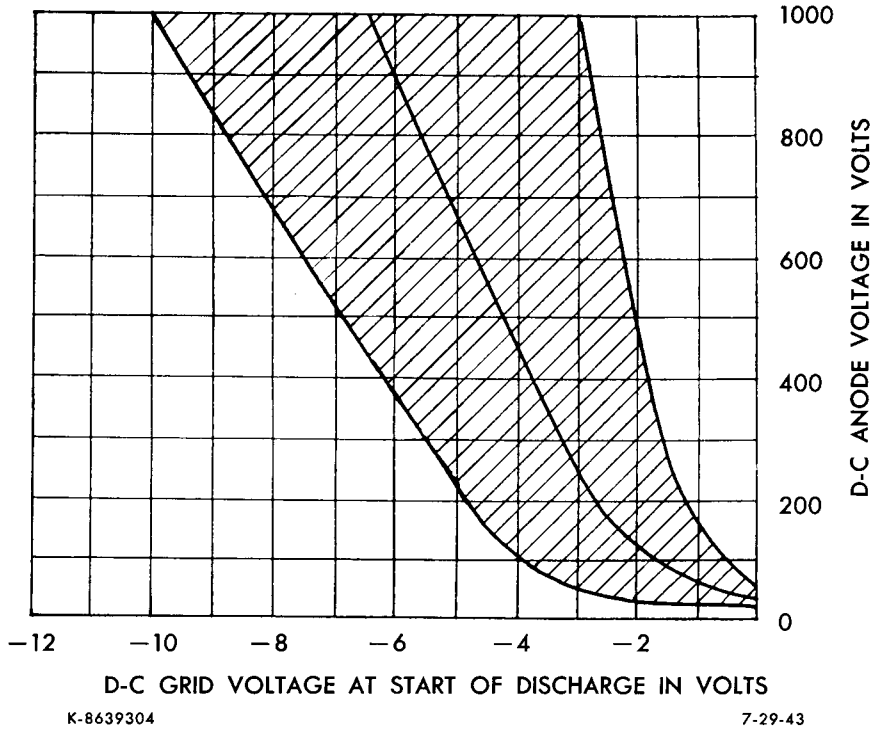
TECHNICAL INFORMATION (CONT'D)

Mechanical

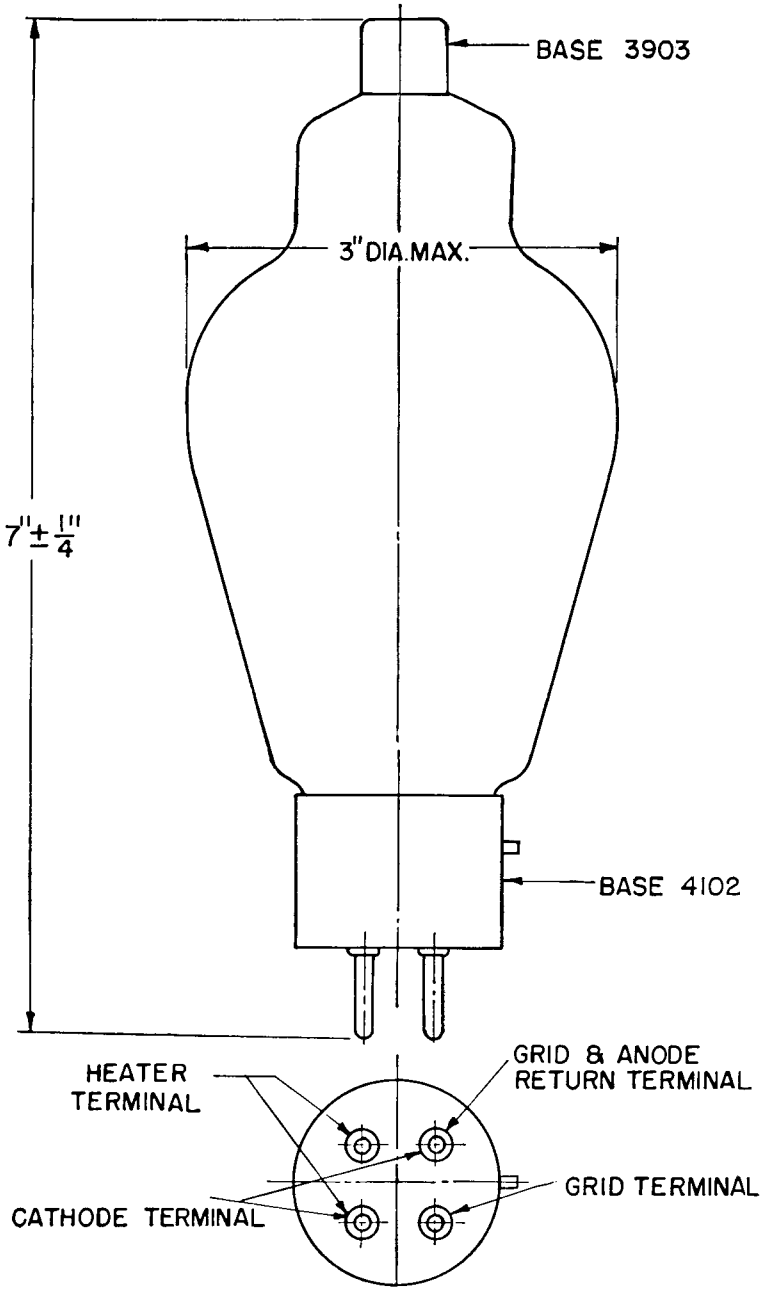
Net weight, approx	4	ounces
Shipping weight, approx	7	pounds
Mounting position		vertical, base down

MAXIMUM RATINGS

Maximum peak anode voltage		
Inverse	1000	volts
Forward	1000	volts
Maximum negative grid voltage		
Before conduction	500	volts
During conduction	10	volts
Maximum anode current		
Instantaneous, 25 cycles and above	15.0	amperes
Instantaneous, below 25 cycles	5.0	amperes
Average	2.5	amperes
Surge, for design only	200	amperes
Duration of surge current	0.1	second
Maximum 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



THYRATRON FG-57
TYPICAL CONTROL CHARACTERISTICS
SHADED AREA SHOWS RANGE OF CHARACTERISTICS
CONDENSED MERCURY TEMPERATURE 40 C



OUTLINE
FG-57 THYRATRON

K-4373343

12-11-44

Electronics Department
GENERAL ELECTRIC
Schenectady, N. Y.

4-45 (4M)
Filing No. 8850