

THYRATRON

DESCRIPTION

The FG-41 is a mercury-vapor thyatron. This tube has a negative control characteristic which enables it to be used in applications where current flow is required 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.....20.0 amperes
 - Heating time, typical.....5 minutes
- Peak voltage drop, typical.....16 volts
- Approximate control characteristics
 - Anode voltage.....250 1000 10,000 volts
 - Grid voltage.....0 +1.5 -6.0 volts
- Anode to grid capacitance, approx.....0.05 micromicrofarad
- Ionization time, approx.....20 microseconds
- Deionization time, approx.....100 microseconds



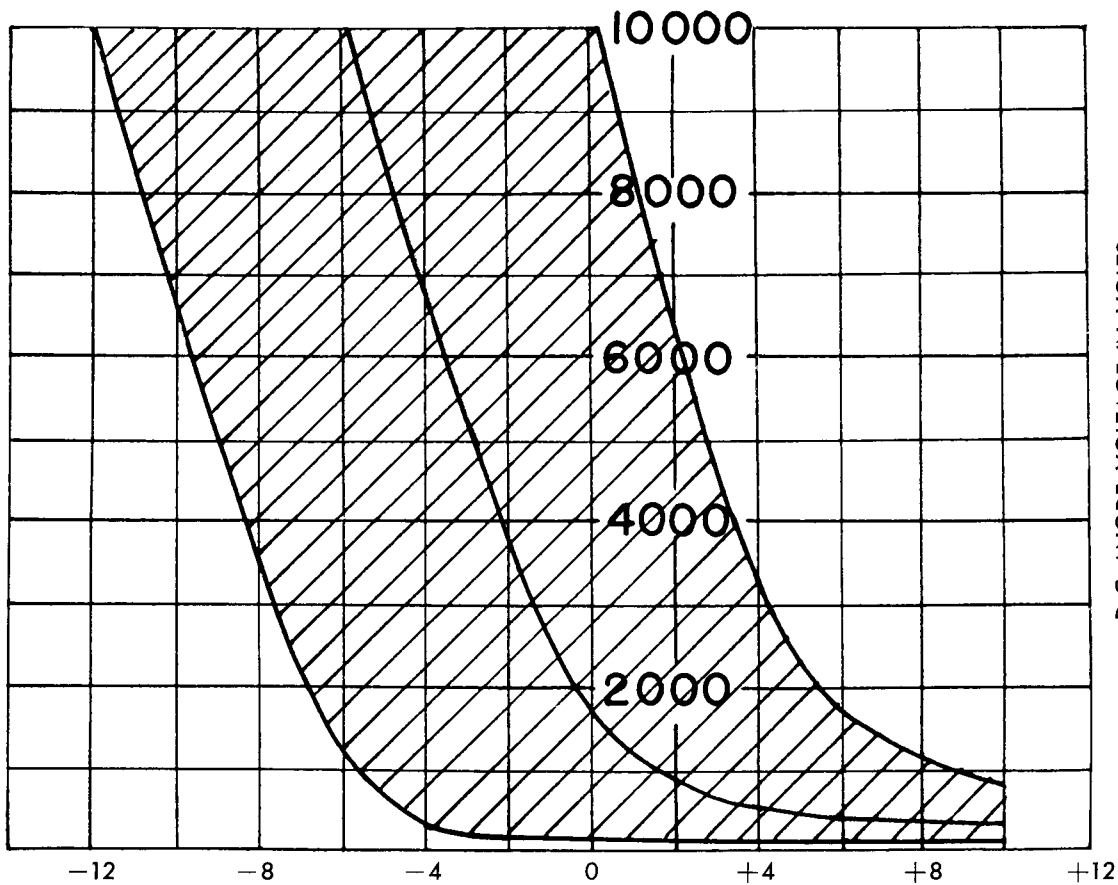
TECHNICAL INFORMATION (CONT'D)

Mechanical

Net weight, approx.	2 pounds
Shipping weight, approx.	8 pounds
Mounting position.	vertical, base down

MAXIMUM RATINGS

Maximum peak anode voltage	
Inverse.	10,000 volts
Forward.	10,000 volts
Maximum negative grid voltage	
Before conduction.	1000 volts
During conduction.	15 volts
Maximum anode current	
Instantaneous, 25 cycles and above.	75 amperes
Instantaneous, below 25 cycles.	25 amperes
Average.	12.5 amperes
Surge, for design only.	1500 amperes
Duration of surge current.	0.1 second
Maximum grid current	
Instantaneous.	5.0 amperes
Average.	1.0 ampere
Maximum time of averaging current.	
.	30 seconds
Temperature limits, condensed mercury.	+40 to +65 centigrade
Recommended temperature, condensed mercury.	+40 centigrade

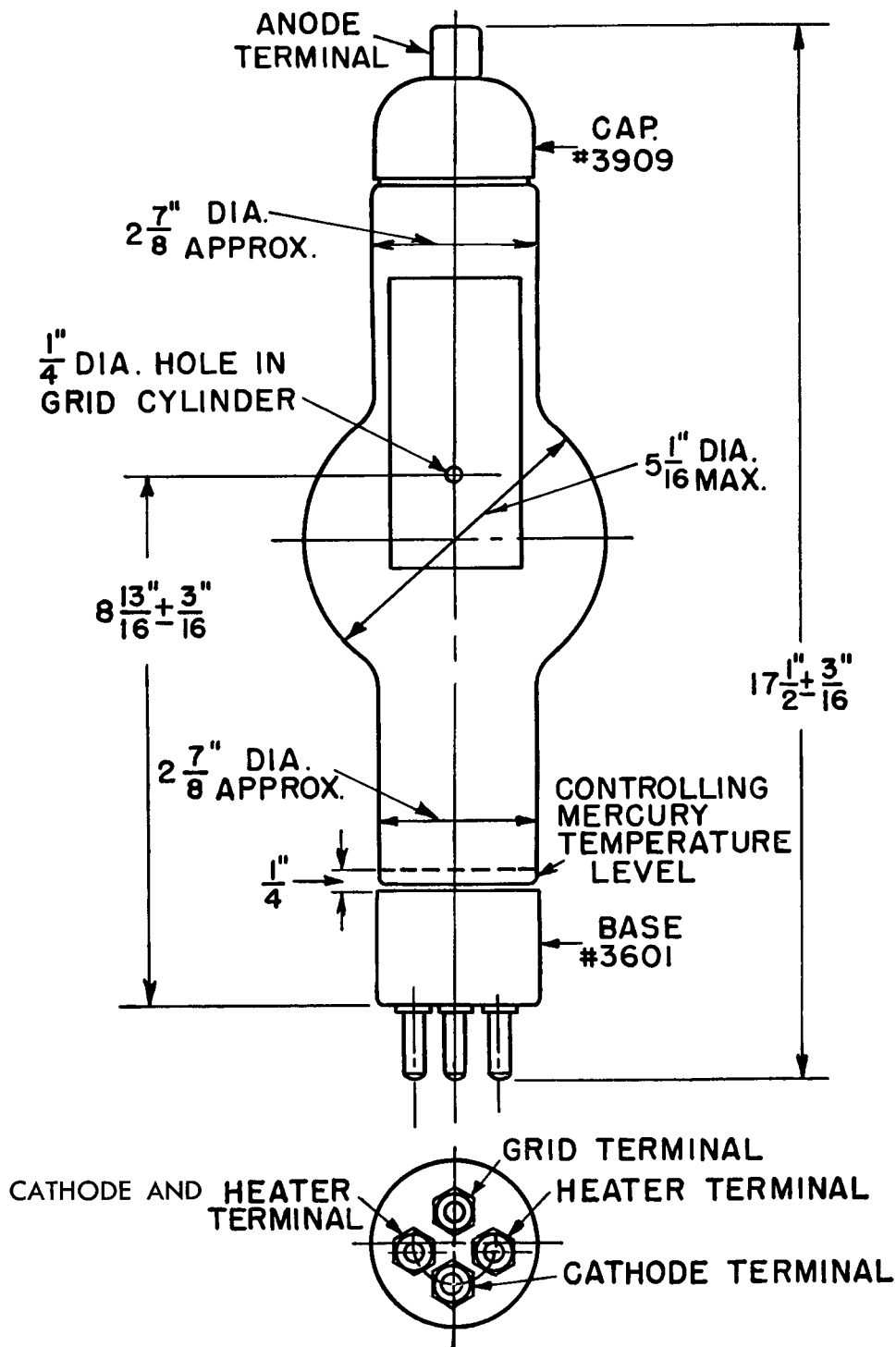


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D-C GRID VOLTAGE AT START OF DISCHARGE IN VOLTS

9-22-43

THYRATRON FG-41 TYPICAL CONTROL CHARACTERISTIC
 SHADED AREA SHOWS RANGE OF CHARACTERISTICS
 CONDENSED HG TEMPERATURE 40 C



K-5182056

2-24-45

OUTLINE
FG-41 THYRATRON

Electronics Department
GENERAL  ELECTRIC
Schenectady, N. Y.