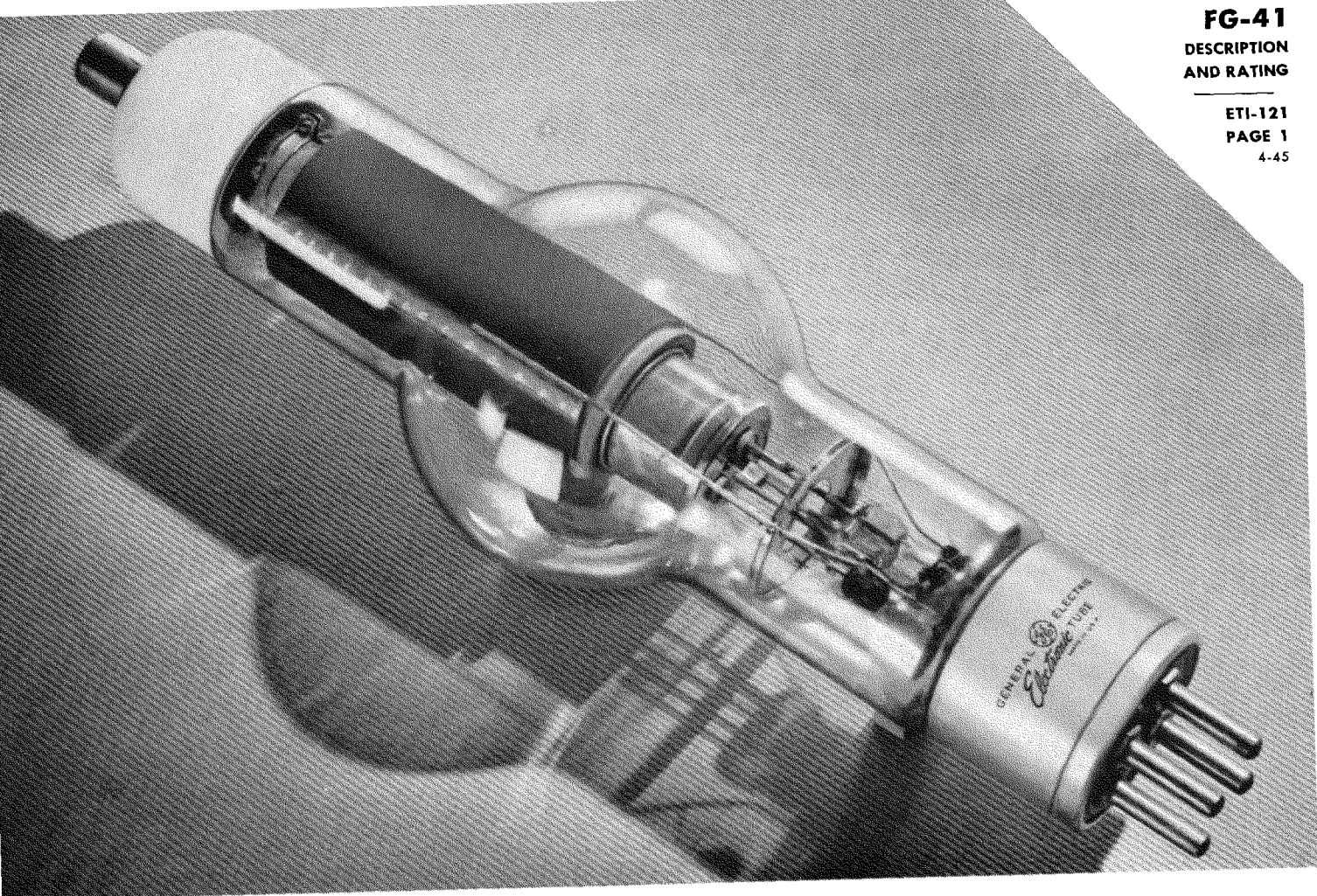




THYRATRON

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



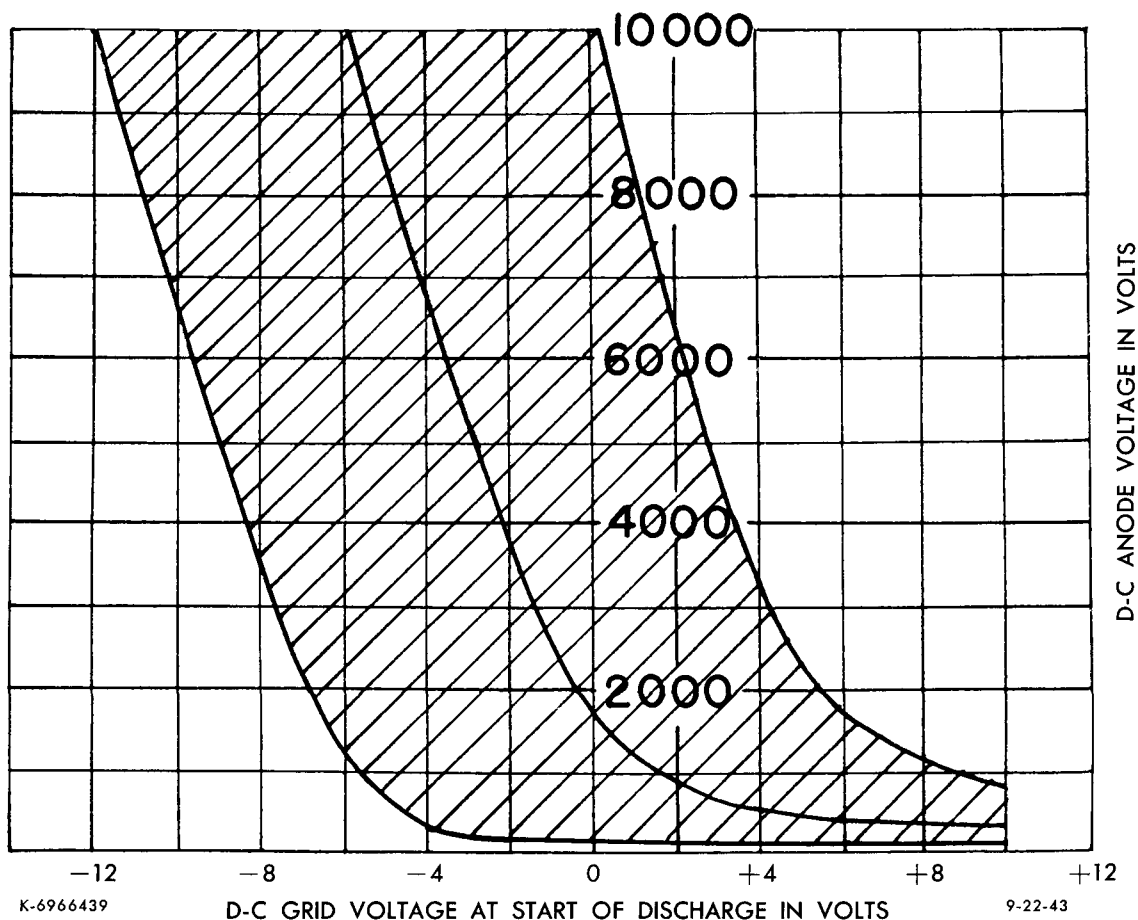
TECHNICAL INFORMATION (CONT'D)

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

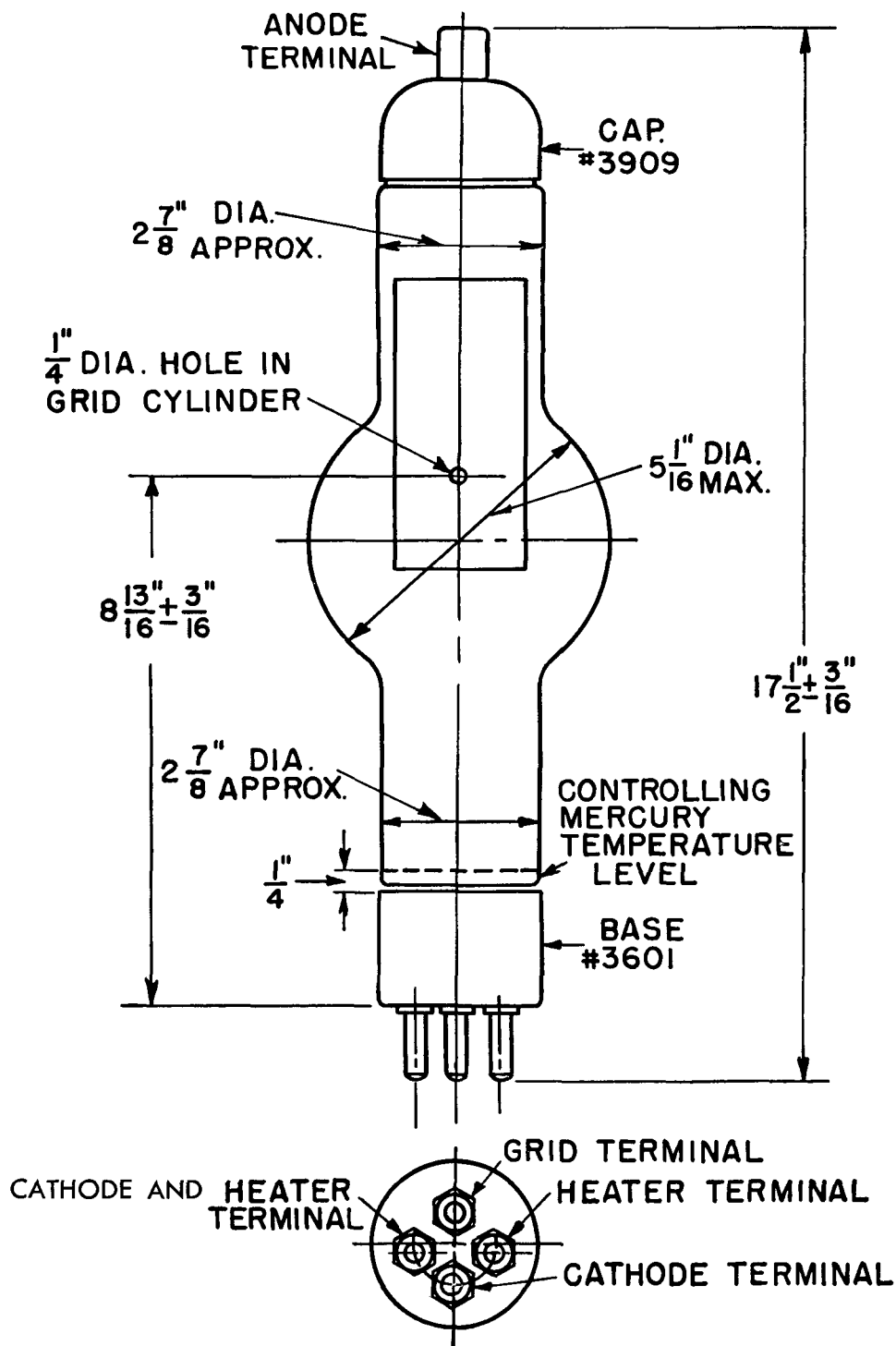


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D-C GRID VOLTAGE AT START OF DISCHARGE IN VOLTS

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.