



THYATRON

DESCRIPTION

The FG-154 is a double-grid inert-gas-filled thyatron for use in applications where the available grid power is very small and where the grid must be actuated from a high-impedance source. It is also used in applications where wide variations in ambient temperature will be encountered.

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.....5.0 volts

Filament current, approx.....7.0 amperes

Filament heating time, typical.....10 seconds

Peak voltage drop, typical.....16 volts

Approximate control characteristics

Anode voltage.....60 100 500 volts

Shield-grid voltage.....0 0 0 volts

Control-grid voltage.....0 -3.5 -9.0 volts

Anode to control-grid capacitance, approx.....0.3 micromicrofarad

Ionization time, approx.....10 microseconds

Deionization time, approx.....1000 microseconds



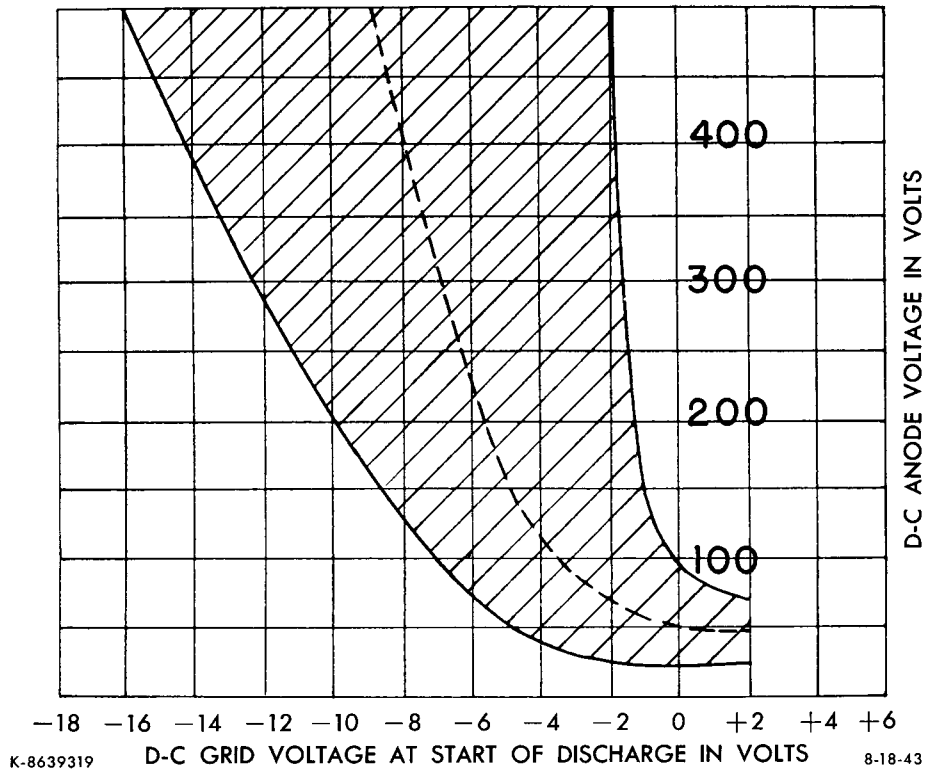
TECHNICAL INFORMATION (CONT'D)

Mechanical

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

MAXIMUM RATINGS

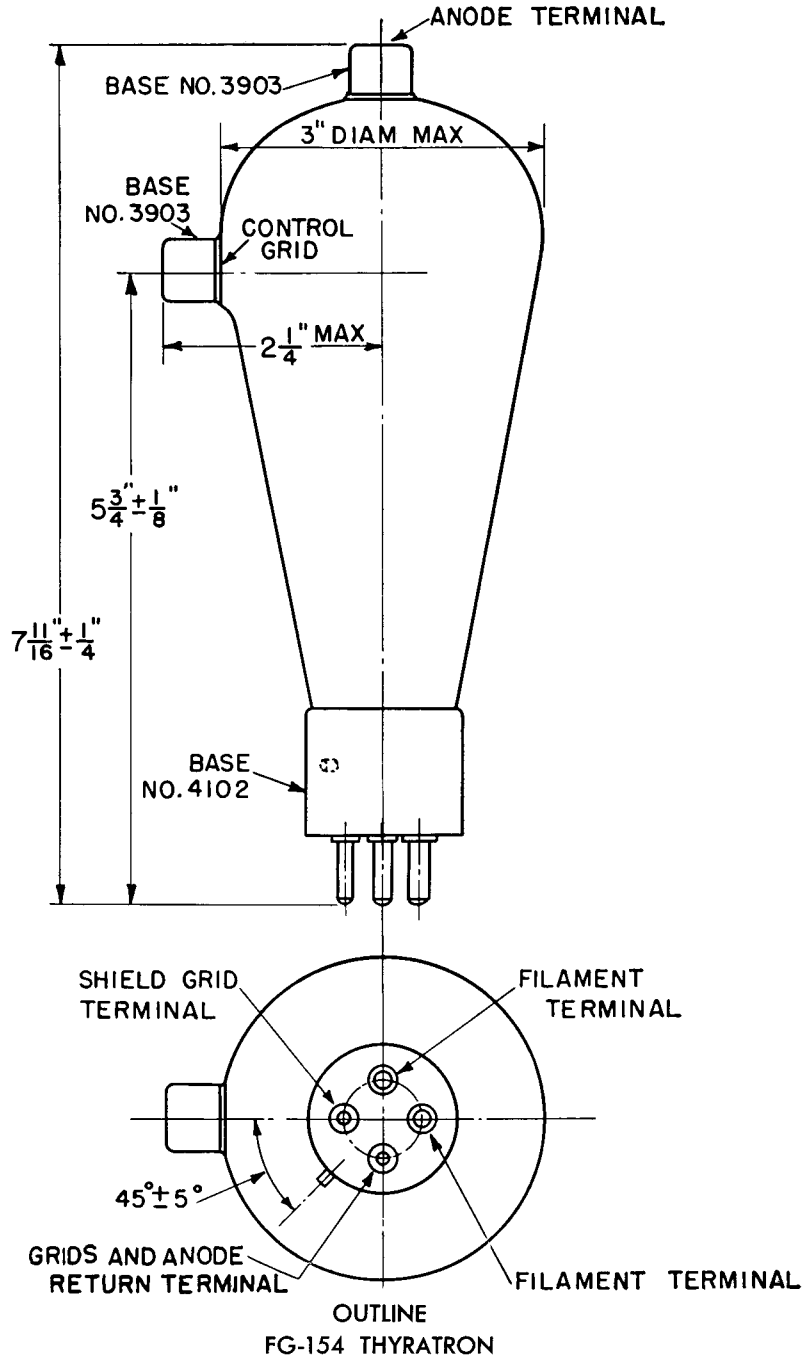
Maximum peak anode voltage		
Inverse.	500	volts
Forward.	500	volts
Maximum negative control-grid voltage		
Before conduction.	300	volts
During conduction.	10	volts
Maximum negative shield-grid voltage		
Before conduction.	50	volts
During conduction.	5	volts
Maximum anode current		
Instantaneous, 25 cycles and above.	10.0	amperes
Instantaneous, below 25 cycles.	5.0	amperes
Average.	2.5	amperes
Surge, for design only.	160	amperes
Duration of surge current.	0.1	second
Maximum control-grid current		
Instantaneous.	1.0	amperes
Average.	0.25	ampere
Maximum shield-grid current		
Instantaneous.	1.0	amperes
Average.	0.25	ampere
Maximum time of averaging current.	15	seconds
Ambient temperature limits.	-20 to +50	centigrade



K-8639319

8-18-43

THYRATRON FG-154
 TYPICAL CONTROL CHARACTERISTICS
 SHADED AREA SHOWS RANGE OF CHARACTERISTICS
 SHIELD GRID VOLTAGE ZERO



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