



THYRATRON

DESCRIPTION

The FG-178-A is an inert-gas-filled thyatron with a negative control characteristic.

Although inert-gas-filled tubes can be operated in much lower ambient temperatures than the mercury-vapor types, they are not rated at as high voltages as mercury tubes of comparable size.

This tube is particularly adapted to applications where it is desired to have current flow in the absence of grid excitation, where constancy of characteristic is required with large variations in ambient temperature, and where the tube is subjected to intermittent operation.

TECHNICAL INFORMATION

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

GENERAL CHARACTERISTICS

Number of electrodes	3		
Electrical			
Cathode—Filamentary type			
Filament voltage	2.5	volts	
Filament current, approx.	2.25	amperes	
Filament heating time, typical	6	seconds	
Peak voltage drop, approx.	16	volts	
Approximate control characteristics			
Anode voltage	25	100	500 volts
Grid voltage	0	-3.0	-7.0 volts
Anode to grid capacitance, approx.	2.5	micromicrofarads	
Ionization time, approx.	10	microseconds	
Deionization time, approx.	1000	microseconds	


Electronic
TUBE

GENERAL  ELECTRIC

TECHNICAL INFORMATION (CONT'D)

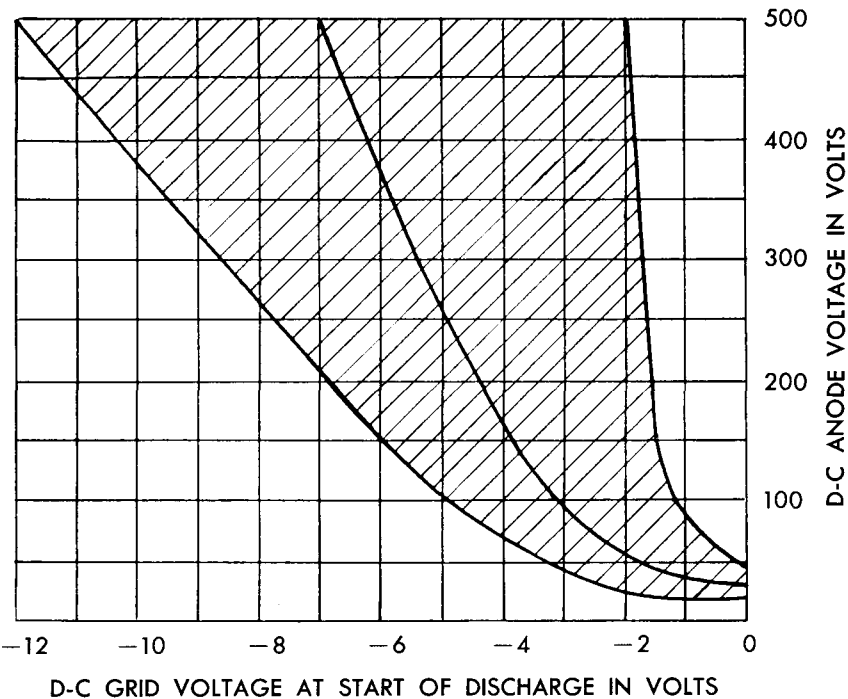
Mechanical

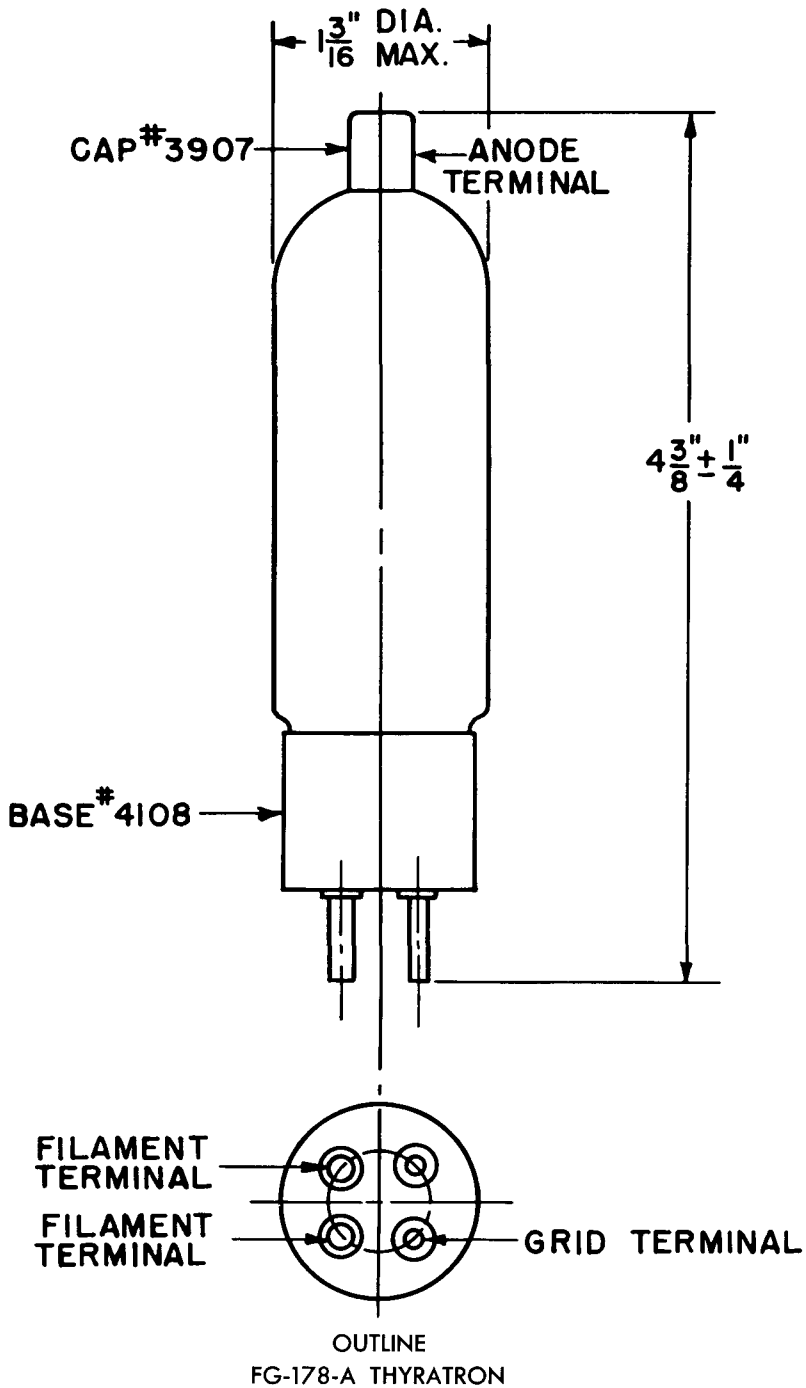
Net weight, approx.	2 ounces	
Shipping weight, approx.	2 pounds	
Mounting position.....	vertical, base down	

MAXIMUM RATINGS

Maximum peak anode voltage		
Inverse	500 volts	
Forward	500 volts	
Maximum negative grid voltage		
Before conduction.....	70 volts	
During conduction.....	10 volts	
Maximum anode current		
Instantaneous, 25 cycles and above.....	0.500 ampere	
Instantaneous, below 25 cycles.....	0.250 ampere	
Average	0.125 ampere	
Surge, for design only.....	20.0 ampere	
Duration of surge current.....	0.1 second	
Maximum grid current		
Instantaneous.....	0.020 ampere	
Average	0.005 ampere	
Maximum time of averaging current.....	15 seconds	
Ambient temperature limits.....	-20 to +50 centigrade	

THYRATRON FG-178-A
TYPICAL CONTROL CHARACTERISTICS
SHADED AREA SHOWS RANGE OF CHARACTERISTICS





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GENERAL ELECTRIC
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