



THYRATRON

DESCRIPTION

The GL-502-A is an inert-gas-filled, double-grid thyatron with negative control characteristics. The control characteristic of this tube is independent of ambient temperature over a wide range. It has high sensitivity characteristics because the grid current is low enough to permit the use of a

high resistance in the grid circuit. Because of its low grid-anode capacitance, the GL-502-A is relatively unaffected by line-voltage surges. The small size and weight of this thyatron are features which adapt it to applications where space and weight are important factors.

TECHNICAL INFORMATION

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

GENERAL CHARACTERISTICS

Number of electrodes	4
Cathode—Indirectly heated type	
Voltage	6.3 volts
Current, approx.	0.6 ampere
Heating time, typical	10 seconds
Peak voltage drop, typical	11 volts
Approximate control characteristics. (0.1-megohm grid resistance)	
Anode voltage	30 100 650 volts
Control-grid voltage	0 -1.5 -3.75 volts
Shield-grid voltage	0 0 0 volts
Anode to control-grid capacitance, approx.	0.2 micromicrofarad
Ionization time, approx.	5 microseconds
Deionization time, approx.	1000 microseconds

GENERAL ELECTRIC



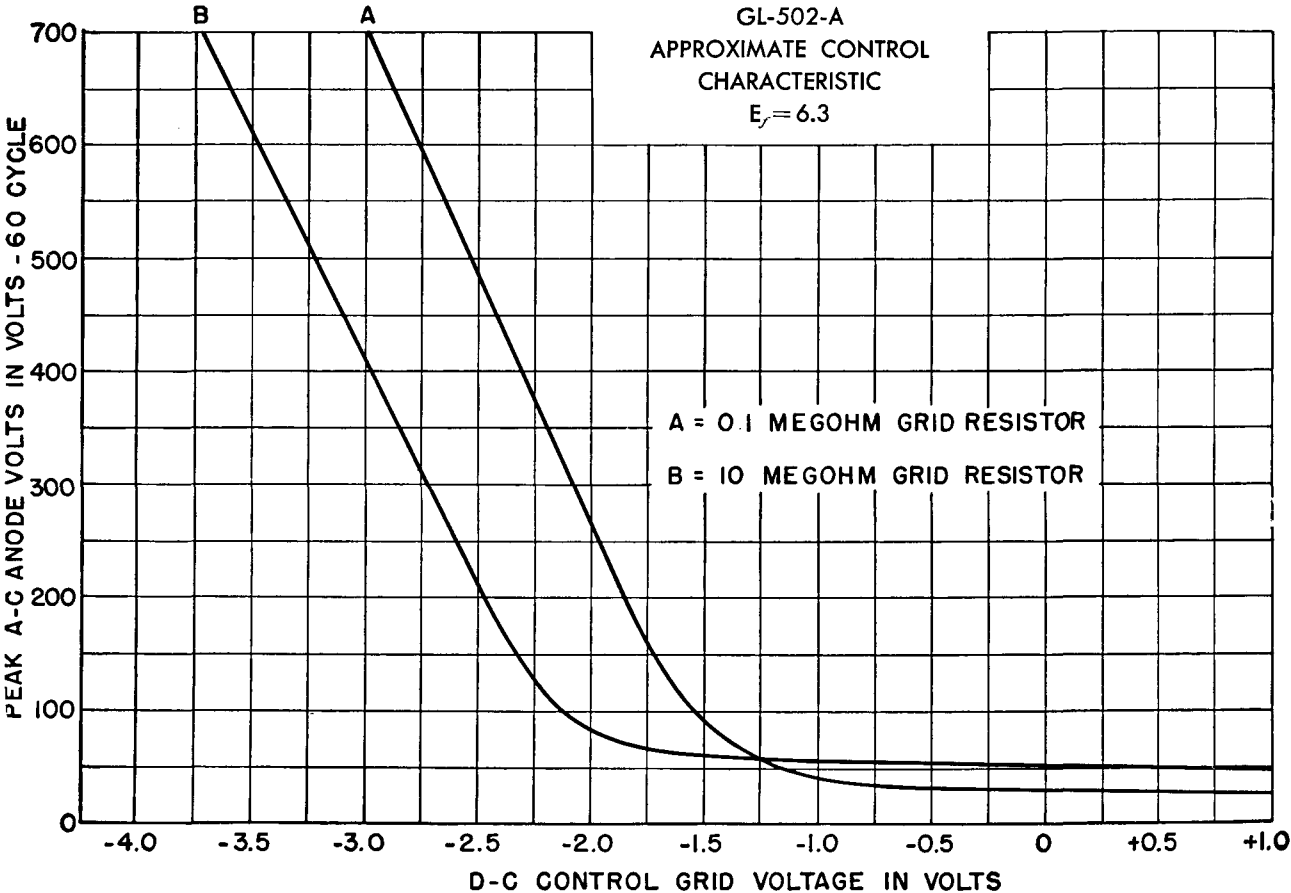
TECHNICAL INFORMATION (CONT'D)

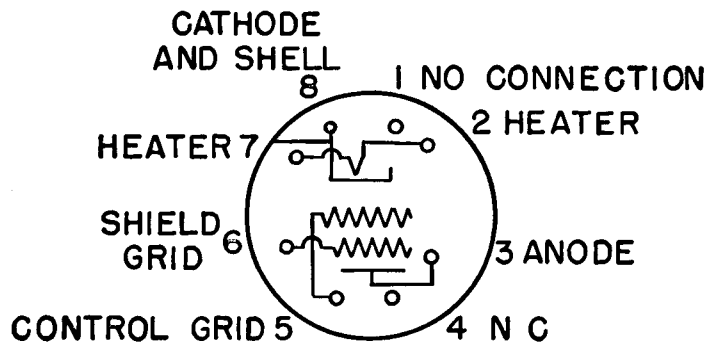
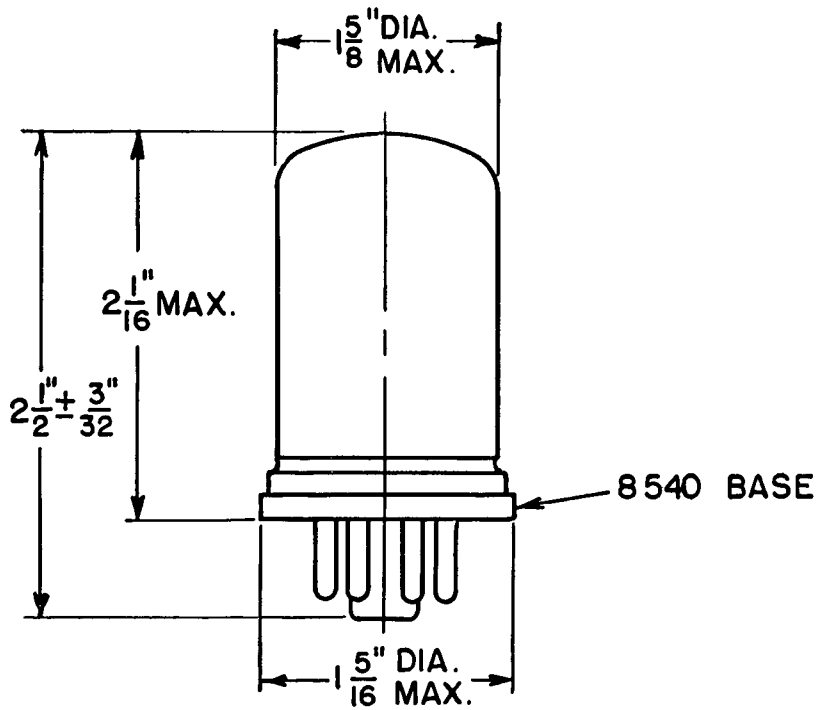
Mechanical

Net weight, approx.....	2 ounces
Shipping weight, approx.....	3 pounds
Operating position.....	vertical or horizontal

MAXIMUM RATINGS

Maximum peak anode voltage	
Inverse.....	1300 volts
Forward.....	650 volts
Maximum negative control-grid voltage	
Before conduction.....	200 volts
During conduction.....	10 volts
Maximum negative shield-grid voltage	
Before conduction.....	100 volts
During conduction.....	5 volts
Maximum anode current	
Instantaneous.....	500 milliamperes
Average.....	100 milliamperes
Surge, for design only.....	10 amperes
Maximum control-grid current	
Instantaneous.....	50 milliamperes
Average.....	10 milliamperes
Maximum shield-grid current	
Instantaneous.....	50 milliamperes
Average.....	10 milliamperes
Maximum time of averaging anode current.....	30 seconds
Ambient temperature limits.....	-55 to +90 centigrade





BOTTOM VIEW OF
SOCKET CONNECTIONS

OUTLINE
GL-502-A THYRATRON

