



# RADIO MANUFACTURERS ASSOCIATION ENGINEERING DEPARTMENT

Release No. 516

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## RMA TYPE 676

### GRID CONTROLLED MERCURY VAPOR RECTIFIER

sponsor:

Westinghouse Electric Corp.

#### GENERAL CHARACTERISTICS

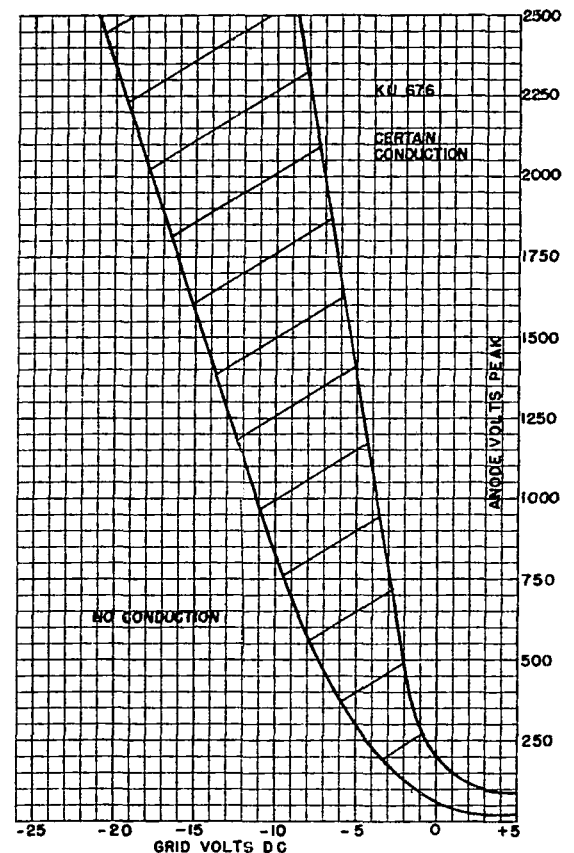
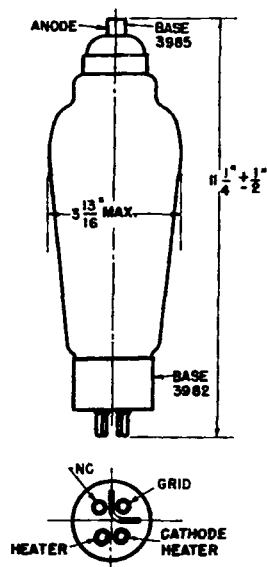
Air-Cooled Triode  
Heater Voltage.....5 Volts  
Heater Current.....10.0 Amperes  
Cathode Heating Time.....5 Minutes  
Grid Current, Max., just before  
Conduction, Grid Negative.....5 Microamperes  
Ionization Time, Max.....10 Microseconds  
Deionization Time, Max.....1000 Microseconds  
Tube Voltage Drop.....12 Volts  
Capacitance, Anode—Grid.....5 uuf  
Control Characteristic.....Negative  
Mounting Position.....Pin Base Down  
Temperature, Range, Optimum,  
Condensed Mercury.....\*45° to 55° C

#### MAXIMUM RATINGS

Up to 150 Cycles

|                                                   |             |                                          |
|---------------------------------------------------|-------------|------------------------------------------|
| Anode Voltage, Peak Forward.....                  | 2500 Volts  | Welder Control Service.....750 Volts     |
| Anode Voltage, Peak Inverse.....                  | 2500 Volts  | Welder Control Service.....750 Volts     |
| Anode Current, Average.....                       | 6.4 Amps.   | Welder Control Service.....2.5 Amps.     |
| Anode Current, Peak.....                          | 40 Amps.    | Welder Control Service.....77 Amps.      |
| Anode Current, Surge, for design only.....        | 200 Amps.   | Welder Control Service.....200 Amps.     |
| Grid Voltage, Peak Negative, before Conduction... | 500 Volts   | Welder Control Service.....500 Volts     |
| Grid Current, Average Positive, Anode Positive... | 0.25 Amp.   | Welder Control Service.....0.25 Amp.     |
| Grid Current, Peak Positive, Anode Positive.....  | 1 Amp.      | Welder Control Service.....1 Amp.        |
| Averaging Time, Anode and Grid Currents.....      | 15 Sec.     | Welder Control Service.....5 Sec.        |
| Temperature Range, Condensed Mercury.....         | *40 to 80°C | Welder Control Service.....*40° to 90° C |

\*Measured at top edge of base.



Space between the limiting curves indicates variations which may be expected in individual tubes initially and throughout life when operated within the specified temperature range.