



**RADIO MANUFACTURERS ASSOCIATION
ENGINEERING DEPARTMENT**

Release No. 516

September 5, 1946

RMA TYPE 677

**GRID CONTROLLED MERCURY
VAPOR RECTIFIER**

sponsor:

Westinghouse Electric Corp.

GENERAL CHARACTERISTICS

Air Cooled Triode
Heater Voltage.....5 Volts
Heater Current..... 10 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, Optimum, Condensed
Mercury.....**35° to 45° C

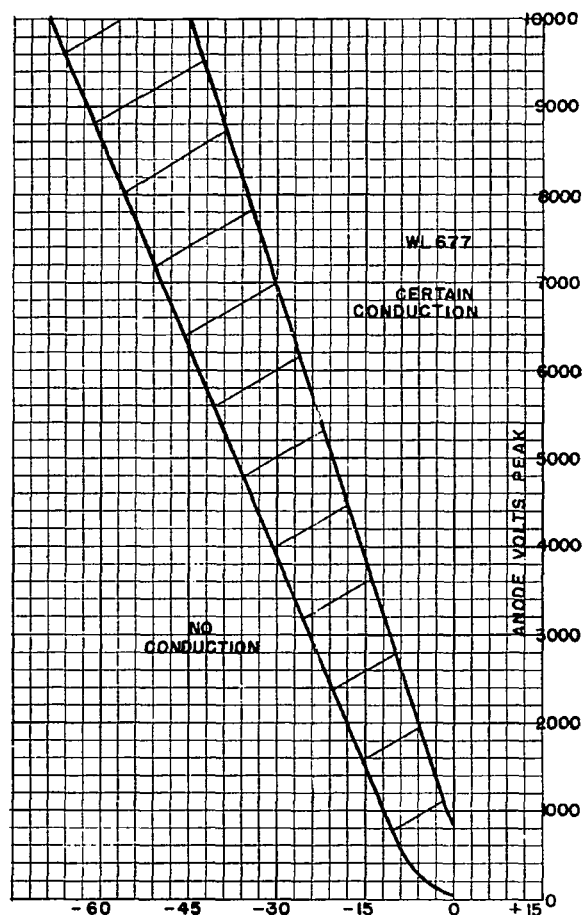
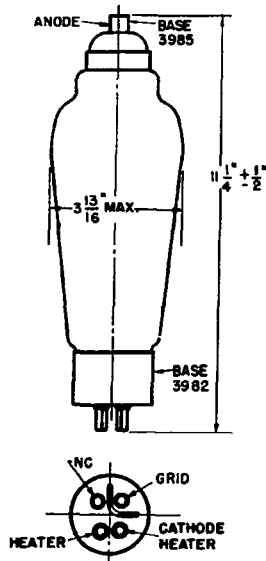
MAXIMUM RATINGS

Up to 150 Cycles

Anode Voltage, Peak Forward.....10,000 Volts
Anode Voltage, Peak Inverse.....10,000 Volts
Anode Current, Average.....*4 Amperes
Anode Current, Peak.....*15 Amperes
Anode Current, Surge, for design only.....*16 Amperes
Grid Voltage, Peak Positive, Anode Negative.....10 Volts
Grid Voltage, Peak Negative, before Conduction.....500 Volts
Grid Current, Average Positive, Anode Pos.....0.25 Ampere
Grid Current, Peak Positive, Anode Positive.....1 Ampere
Averaging Time, Anode and Grid Currents.....15 Seconds
Temperature Range, Condensed Mercury.....**30° to 50° C

*These ratings apply only when the tube is used in circuits which limit the short circuit current to the values given.

**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.