



# 5822 IGNITRON

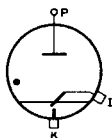
5822

## DATA

### General:

|                                                                                |                            |
|--------------------------------------------------------------------------------|----------------------------|
| Cathode, Ignitor Excited. . . . .                                              | Mercury-Pool Type          |
| Starting time at required ignitor<br>voltage or current <sup>□</sup> . . . . . | 100 $\mu$ sec              |
| Anode Voltage Drop:                                                            |                            |
| At peak anode current of 1500 amperes . . . . .                                | 25 volts                   |
| Cooling:                                                                       |                            |
| Type. . . . .                                                                  | water                      |
| Minimum Water Flow:                                                            |                            |
| At no load. . . . .                                                            | 0.5 gpm                    |
| At rated continuous average current . . . . .                                  | 1.5 gpm                    |
| Maximum Pressure Drop:                                                         |                            |
| At 1.5 gpm. . . . .                                                            | 5 lb./sq. in.              |
| Minimum Inlet-Water Temperature . . . . .                                      | 10 $^{\circ}$ C            |
| Maximum Outlet-Water Temperature. . . . .                                      | 35 $^{\circ}$ C            |
| Maximum Water-Temperature Rise. . . . .                                        | 6 $^{\circ}$ C             |
| Overall Rigid Length (Approx.). . . . .                                        | 14-1/2"                    |
| Maximum Diameter (including water connections). . . . .                        | 7-1/4"                     |
| Mounting Position . . . . .                                                    | Vertical, flexible lead up |
| Terminal Connections:                                                          |                            |

P - Anode Terminal  
(Flexible lead)  
K - Cathode Terminal  
(Opposite the  
anode terminal)



I - Ignitor Terminal  
(Adjacent to the  
cathode terminal)

## FREQUENCY-CHANGER RESISTANCE-WELDING SERVICE

For input-supply frequency from 50 to 60 cycles per second  
and minimum output frequency of 5 cycles per second

### Maximum Ratings, Absolute Values:

|                                                                              | Rating I  | Rating II |       |
|------------------------------------------------------------------------------|-----------|-----------|-------|
| PEAK ANODE VOLTAGE:                                                          |           |           |       |
| Forward . . . . .                                                            | 1200 max. | 1500 max. | volts |
| Inverse . . . . .                                                            | 1200 max. | 1500 max. | volts |
| ANODE CURRENT: <sup>○</sup>                                                  |           |           |       |
| Peak. . . . .                                                                | 1500 max. | 1200 max. | amp   |
| Corresponding Average*. . . . .                                              | 20 max.   | 16 max.   | amp   |
| Average*. . . . .                                                            | 70 max.   | 56 max.   | amp   |
| Corresponding Peak. . . . .                                                  | 420 max.  | 336 max.  | amp   |
| RATIO OF FAULT ANODE CURRENT<br>TO PEAK ANODE CURRENT <sup>●</sup> . . . . . | 12.5 max. | 12.5 max. |       |

<sup>○</sup> Ratings are for zero phase-control angle. Straight-line interpolation on log-log paper is permissible between corresponding points.

\* Averaged over any 6.25-second maximum interval.

<sup>●</sup> Duration of fault anode current should be limited to 0.15 second.

<sup>□</sup>: See next page.

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TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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## IGNITRON

## PEAK IGNITOR VOLTAGE:

|                                 |                  |       |
|---------------------------------|------------------|-------|
| Positive <sup>□</sup> . . . . . | { Equal to anode | volts |
|                                 | { 200 min.       | volts |
| Negative . . . . .              | { 5 max.         | volts |

## IGNITOR CURRENT:

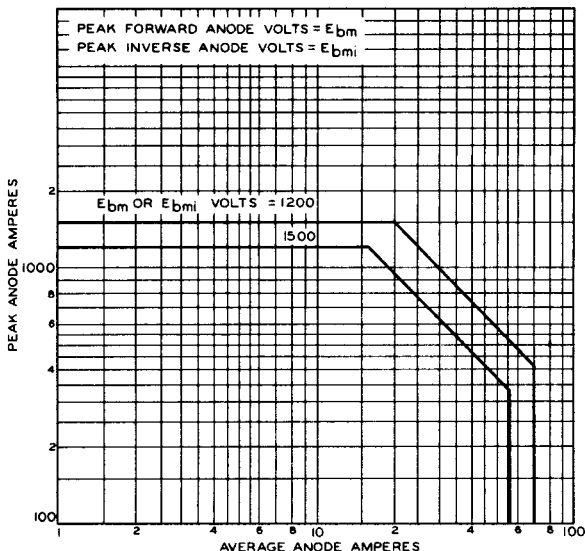
|                                |            |     |
|--------------------------------|------------|-----|
| Peak <sup>□</sup> . . . . .    | { 100 max. | amp |
|                                | { 30 min.  | amp |
| RMS. . . . .                   | { 10 max.  | amp |
| Average <sup>■</sup> . . . . . | { 1 max.   | amp |

□ Ignition will occur if either minimum peak positive ignitor potential is applied, or minimum peak ignitor current flows, for the indicated starting time (see Cathode).

■ Averaged over any 5-second maximum interval.

Outline Drawing for the 5822 is the same  
as shown for Type 5552

## RATING CHART



92CM-7683