

# FEDERAL POWER TRIODE Type F-320BA/220CA 5 Kilowatts Plate Dissipation



## GENERAL DATA

### DESCRIPTION:

Federal's F-320BA/220CA is a three-electrode tube designed for use as an R-F Amplifier, Oscillator, or Class B Modulator. The anode, forced air-cooled, is capable of dissipating 5 kilowatts. The cathode is a pure tungsten filament. Maximum ratings apply up to 4 megacycles.

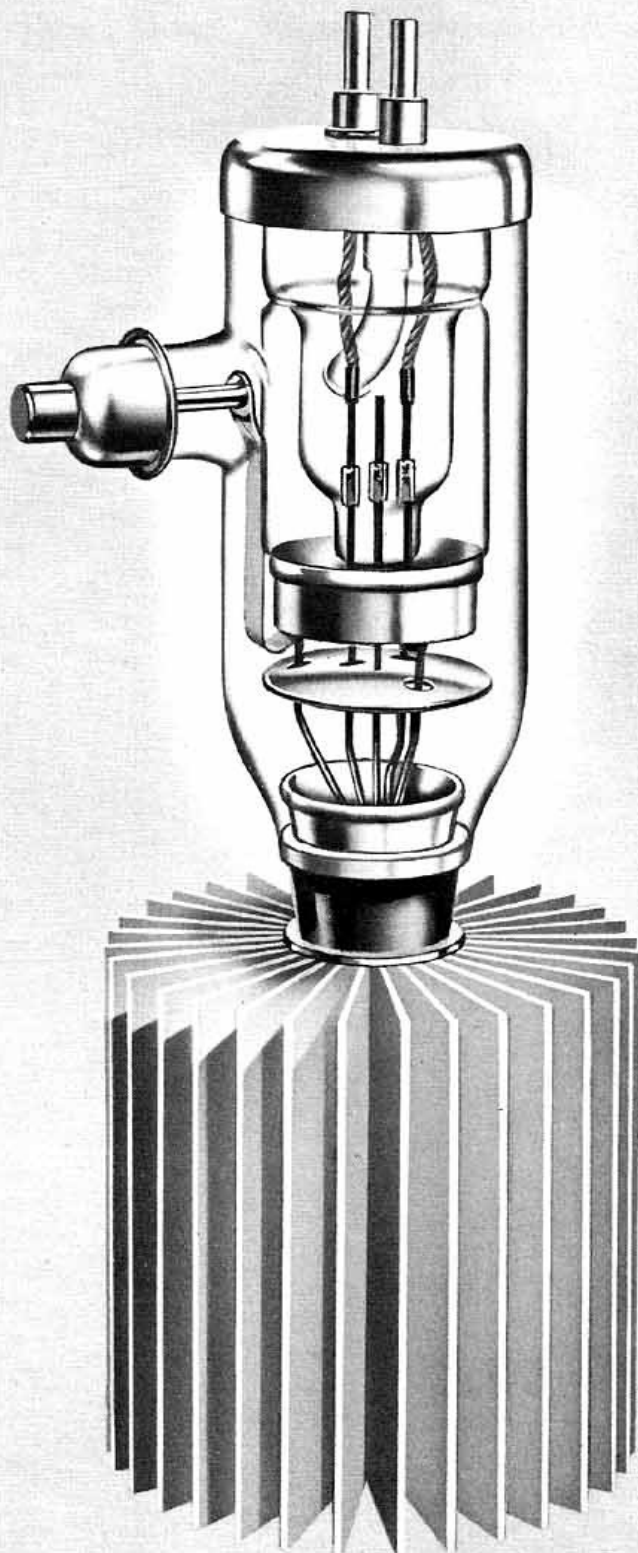
### Electrical:

|                                                                       |                     |
|-----------------------------------------------------------------------|---------------------|
| ▶ Filament Voltage                                                    | 21.5 Volts          |
| ▶ Filament Current                                                    | 41.0 Amperes        |
| ▶ Filament Starting Current                                           | 82.0 Amperes        |
| ▶ Available Thermionic Emission                                       | 7.0 Amperes         |
| ▶ Amplification Factor, at<br>$I_b = 0.85$ amps.<br>$E_c = -50$ volts | 40                  |
| ▶ Interelectrode Capacitances                                         |                     |
| Grid-Plate                                                            | 23.5 $\mu\text{mf}$ |
| Grid-Filament                                                         | 17.5 $\mu\text{mf}$ |
| Plate-Filament                                                        | 1.6 $\mu\text{mf}$  |

### Mechanical:

|                                                                  |         |
|------------------------------------------------------------------|---------|
| ▶ Mounting Position—<br>Vertical, Anode Down                     |         |
| ▶ Type of Cooling—Forced Air                                     |         |
| ▶ Required Air Flow on Anode<br>Plate Dissipation<br>(Kilowatts) | 5       |
| Air Flow—Cubic<br>Feet Per Minute                                | 600     |
| ▶ Maximum Glass Temperature                                      | 150° C  |
| ▶ Net Weight, approximate                                        | 35 Lbs. |

For Characteristic Curves see F-320-B. Except for reduction of plate dissipation to 5KW, Maximum Ratings and Typical Operation of F-320-B apply.



**FEDERAL POWER TRIODE**  
**Type F-320BA/220CA**  
**5 Kilowatts Plate Dissipation**



Precision craftsmanship was initiated by Federal in the earliest days of tube manufacture, and has been maintained ever since.

