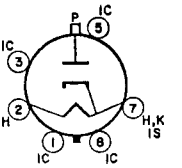
3A3 Refer to chart at end of section.

3A3/3B2 Refer to chart at end of section.

3A3A
3A3A/3B2 Refer to chart at end of section.

3A3B Refer to chart at end of sectior

3A3C HALF-WAVE VACUUM RECTIFIER



8EZ

Glass octal type used as a rectifier in high-voltage pulse circuits of color television receivers. **Outlines section,** 14F; requires octal socket. Socket terminals 1, 3, 4, 5, 6, and 8 may be connected to terminal 7. Socket terminals 4 and 6 may be used as tie points at or near cathode potential. For high-voltage and X-ray safety considerations, refer to page 93.

Heater Voltage (ac)	3.15	volts
Heater Current	0.22	ampere
Direct Interelectrode Capacitances:		
Plate to Heater, Cathode, and Internal Shield	1.5	pF

Pulsed Rectifier

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	38000•	volts
Peak Plate Current	100	mA
Average Plate Current	2	mA
Heater Voltage:		
Absolute-maximum value	3.65	volts
Absolute-minimum value	2.65	volts

CHARACTERISTIC, Instantaneous Value

Tube Voltage Drop (Approx.) for plate current of 7 mA	100	volts

X-RADIATION CHARACTERISTIC

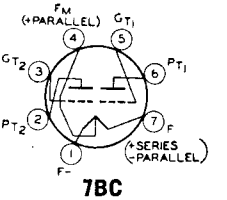
X-Radiation, Maximum:		
Statistical value controlled on a lot sampling basis	25	mR/hr

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).
• DC component must not exceed 30000 volts.
Caution—Operation of this tube outside of the maximum values indicated above may result in either temporary or permanent changes in the X-radiation characteristic of the tube. Equipment design must be such that these maximum values are not exceeded.

3A4 Refer to chart at end of section.

3A5 H-F TWIN TRIODE

INDUSTRIAL TYPE



7BC

Miniature type twin triode used as a A-F power amplifier or an R-F power amplifier or oscillator. Each triode can be used independently of the other. **Outlines section,** 5C; requires miniature 7-contact socket.

Filament Arrangement	**Series***	**Parallel****	
Filament Voltage (dc)	2.8	1.4	volts
Filament Current	0.11	0.22	ampere

Direct Interelectrode Capacitances:	Unit No. 1	Unit No. 2	
Grid to Plate	3.2	3.2	pF
Grid to Filament	0.9	0.9	pF
Plate to Filament	1.0	1.0	pF
Plate to Plate	0.32		pF

A-F Power Amplifier (Each Unit)

MAXIMUM RATINGS (Design-Center Values)

Plate Voltage	135	volts
Plate Current	5	mA
Plate Dissipation	0.5	watt

CHARACTERISTICS

Plate Voltage	90	volts
Grid Voltage	—2.5	volts
Amplification Factor	15	
Plate Resistance	8300	ohms
Transconductance	1800	μmhos
Plate Current	3.7	mA

R-F Power Amplifier and Oscillator—Class C Telegraphy

Key-down conditions per tube without modulation

MAXIMUM RATINGS (Design-Center Values)

DC Plate Voltage	135	volts
DC Grid Voltage	—30	volts
DC Plate Current (per unit)	15	mA
DC Grid Current (per unit)	2.5	mA
Plate Input (per unit)	2.0	watts
Plate Dissipation (per unit)	1.0	watt

TYPICAL OPERATION (At 40 MHz With Both Units In Push-Pull)

DC Plate Voltage	135	volts
DC Grid Voltage●	—20	volts
	4000	ohms
	570	ohms
Peak R-F Grid-to-Grid Voltage	90	volts
DC Plate Current	30	mA
DC Grid Current (approx.)	5	mA
Driving Power (approx.)	0.2	watt
Power Output (approx.)	2	watts

* Filament voltage applied across two sections in series between pins No. 1 and No. 7. Grid voltage is referred to pin No. 1. For series filament operation, a shunting resistor must be connected across the section between pins No. 1 and No. 4. to by-pass excess cathode current in this section. The value of the shunting resistor should be adjusted to make the voltage across the shunted section equal to the voltage across the section between pins No. 4 and No. 7. When other tubes in series-filament arrangement contribute to the filament current of the 3A5, an additional shunting resistor may be required between pins No. 1 and No. 7.

** Filament voltage applied across the two sections in parallel between pin No. 4 and pins No. 1 and No. 7 connected together. Grid voltage is referred to pins No. 1 and No. 7 tied together.

● Obtained by grid resistor (4000), cathode resistor (570), or fixed supply.

Refer to chart at end of section. **3A8GT**

Refer to chart at end of section. **3AF4A**

Refer to type 6AF4A. **3AF4A/3DZ4**

Refer to type 6AL5. **3AL5**

Refer to chart at end of section. **3AT2**