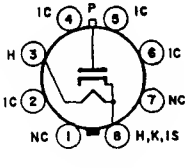
3DF3

3DF3A

HALF-WAVE VACUUM RECTIFIER

Glass octal types used as a high-voltage rectifier to supply power to the anode of the picture tube in television receivers. Outlines section, 14G and 14H, respectively; requires octal socket. Socket terminals 1 and 7 may be used as tie points for components at or near heater potential. For high-voltage and X-ray safety considerations, refer to page 93. Heater: volts (ac/dc), 3.15; ampere, 0.48.



8MT

Flyback Rectifier

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	38000●	volts
Peak Plate Current	110	mA
Average Plate Current	2.2	mA
Heater Voltage:		
Absolute maximum value	3.65	volts
Absolute-minimum value	2.65	volts

CHARACTERISTIC, Instantaneous Value

Tube Voltage Drop for plate current of 7 mA	60	volts

X-RADIATION CHARACTERISTIC

X-Radiation, Maximum:

	3DF3	3DF3A	
Statistical value controlled on a lot sampling basis	25	8	mR/hr

Pulse duration must not exceed 15% of a horizontal scanning cycle.

● The dc component must not exceed 30000 volts.

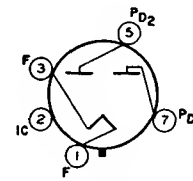
Caution—Operation of this tube outside of the maximum values indicated above may result in either temporary or permanent changes in the X-radiation characteristic of the tube. Equipment design must be such that these maximum values are not exceeded.

3DG4

3DH3

FULL-WAVE VACUUM RECTIFIER

Glass octal type used in power supplies of color and black-and-white television receivers and other equipment having high dc requirements. Outlines section, 19E; requires octal socket. It is especially important that this tube, like other power-handling tubes, be adequately ventilated. For discussion of Rating Chart, refer to Interpretation of Tube Data. Filament: volts (ac/dc), 3.3; amperes, 3.8.



5DE

Full-Wave Rectifier

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage	1050	volts
Peak Plate Current (Per Plate)	1.2	amperes
Hot-Switching Transient Plate Current (Per Plate)	6.5	amperes
AC Plate Supply Voltage (Per Plate, rms)	See Rating Chart	
DC Output Current (Per Plate)	See Rating Chart	
Bulb Temperature (At hottest point on bulb surface)	200	°C

TYPICAL OPERATION WITH CAPACITOR INPUT TO FILTER

AC Plate-to-Plate Supply Voltage (rms)	550	volts
Filter-Input Capacitor•	40	μF
Effective Plate-Supply Impedance per Plate	32	ohms
DC Output Voltage at Input to Filter (Approx.):		
At full-load current of 350 mA	300	volts

CHARACTERISTICS

Tube Voltage Drop for plate current of 350 mA (per plate)	25	volts

• Higher values of capacitance than indicated may be used, but the effective plate-supply impedance may have to be increased to prevent exceeding the maximum peak-plate-current rating.