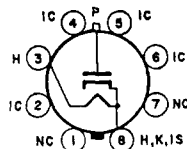


3DF3**HALF-WAVE
VACUUM RECTIFIER****3DF3A**

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
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X-RADIATION CHARACTERISTIC**X-Radiation, Maximum:**

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

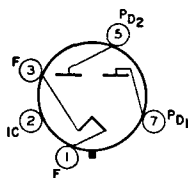
Pulse duration must not exceed 15% of a horizontal scanning cycle.

● 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

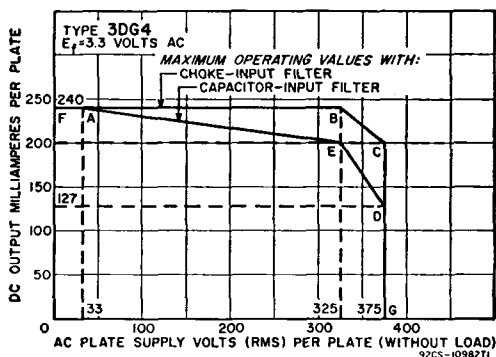
AC Plate-to-Plate Supply Voltage (rms)	550	volts
Filter-Input Capacitor*	40	μF
Effective Plate-Supply Impedance per Plate	32	ohms
DC Output Voltage at Input to Filter (Approx.):		
At full-load current of 350 mA	300	volts

CHARACTERISTICS

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

RATING CHART

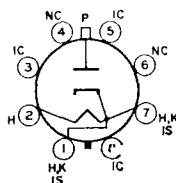


For replacement use type 3DA3/3DH3.

3DH3

HALF-WAVE VACUUM RECTIFIER

3DJ3



8MX

Glass octal type used as a high-voltage rectifier to supply power to the anode of the picture tube in color television receivers. Outlines section, 14H; requires octal socket. Socket terminals 4 and 6 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, 0.3.

Flyback Rectifier

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

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	38000●	volts
Peak Plate Voltage	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 for plate current of 7 mA	70	volts
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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.

● 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.

Refer to type 6DK6.

3DK6

Refer to chart at end of section.

3DR3

Refer to chart at end of section.

3DS3

For replacement use type 3DT6A.

3DT6

Refer to type 6DT6A.

3DT6A

Refer to chart at end of section.

For replacement use type 3AF4A/3DZ4.

3DZ4

Refer to chart at end of section.

3EA5

For replacement use type 3EH7/XF183.

3EH7

3EH7/XF183	Refer to type 6EH7/EF183.
3EJ7	Refer to chart at end of section.
3EJ7/XF184	Refer to type 6EJ7/EF184.
3ER5	Refer to type 6ER5.
3FH5	Refer to chart at end of section.
3FS5	Refer to type 6FS5.
3GK5	Refer to type 6GK5.
3GS8	Refer to chart at end of section. For replacement use type 3BU8/3GS8.
3GS8/3BU8	Refer to chart at end of section.
3HA5	Refer to chart at end of section. For replacement use type 3HM5/3HA5.
3HM5/3HA5	Refer to type 6HM5/6HA5.
3HQ5	Refer to type 6HQ5.
3HS8	Refer to chart at end of section.
3JC6	Refer to chart at end of section.
3JC6A	Refer to type 6JC6A.
3JD6	Refer to type 6JD6.
3KT6	Refer to type 6KT6.
3LF4	Refer to chart at end of section.
3Q4	Refer to chart at end of section.
3Q5GT	Refer to chart at end of section.
3S4	Refer to chart at end of section.
3V4	Refer to chart at end of section.
4AU6	Refer to type 6AU6A.
4AV6	Refer to type 6AV6.
4BC5	Refer to chart at end of section.
4BC8	Refer to type 6BC8.
4BL8	Refer to chart at end of section.
4BL8/XCF80	Refer to type 6BL8/ECF80.
4BN6	Refer to type 6BN6.
4BQ7A	For replacement use type 4BQ7A/4BZ7.

Refer to type 6BQ7A/6BZ7/6BS8.	4BQ7A/4BZ7
Refer to chart at end of section.	4BS8
Refer to chart at end of section.	4BU8
Refer to type 6BU8.	4BU8/4GS8
Refer to type 6BZ6.	4BZ6
Refer to chart at end of section. For replacement use type 4BQ7A/4BZ7.	4BZ7
Refer to type 6CB6A.	4CB6
Refer to type 6CS6.	4CS6
Refer to chart at end of section.	4CY5
Refer to type 6DE6.	4DE6
Refer to type 6DK6.	4DK6
Refer to chart at end of section.	4DT6
Refer to type 6DT6A.	4DT6A
Refer to chart at end of section.	4EH7
Refer to type 6EH7/EF183.	4EH7/LF183
Refer to chart at end of section.	4EJ7
Refer to type 6EJ7/EF184.	4EJ7/LF184
Refer to chart at end of section.	4ES8
Refer to chart at end of section. For replacement use type 4KN8.	4ES8/XCC189
Refer to chart at end of section. For replacement use type 4LU6.	4EW6
Refer to type 6GK5.	4GK5
Refer to type 6GJ7/ECF801.	4GJ7/XCF801
Refer to chart at end of section.	4GM6
Refer to chart at end of section. For replacement use type 4BU8/4GS8.	4GS8
Refer to chart at end of section.	4GS8/4BU8
Refer to chart at end of section.	4GX7
Refer to chart at end of section.	4GZ5
Refer to chart at end of section. For replacement use type 4HM5/4HA5.	4HA5
Refer to chart at end of section. For replacement use type 4HM5/4HA5.	4HA5/PC900
Refer to chart at end of section.	4HA7