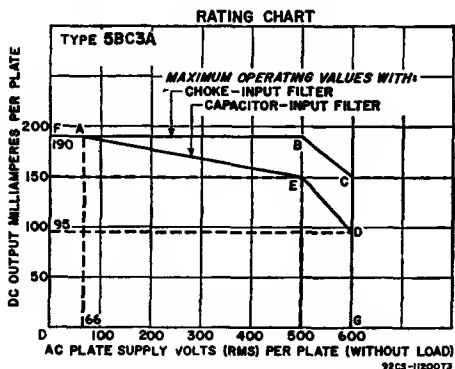


TYPICAL OPERATION WITH CHOKE INPUT TO FILTER

AC Plate-to-Plate Supply Voltage (rms)	900	1100	volts
Filter-Input Choke	10	10	henries
DC Output Voltage at Input to Filter (Approx.):			
At load current of: 348 mA	340	—	volts
275 mA	—	440	volts
174 mA	355	—	volts
137.5 mA	—	445	volts

° If hot switching is regularly required in operation, the use of choke-input circuits is recommended. Such circuits limit the hot-switching current to a value no higher than that of the peak plate current. When capacitor-input circuits are used, a maximum peak current value per plate of 5 amperes during the initial cycles of the hot-switching transient should not be exceeded.

* 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 rating for peak plate current.



Refer to chart at end of section.

Refer to type 6BK7B.

Refer to type 6BQ7A.

Refer to type 6BR8A.

Refer to chart at end of section.

Refer to type 6BW8.

Refer to type 6CG8A.

Refer to chart at end of section.

Refer to type 6CL8A.

Refer to chart at end of section.

Refer to type 6CQ8.

Refer to type 6CZ5.

Refer to chart at end of section.

5BE8

5BK7A

5BQ7A

5BR8

5BT8

5BW8

5CG8

5CL8

5CL8A

5CM8

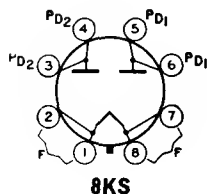
5CQ8

5CZ5

5DH8

FULL-WAVE VACUUM RECTIFIER

5DJ4



Glass octal type used in power supplies of radio and television receivers having high dc requirements. Outlines section, 19E; requires octal socket. Operation in vertical position is preferred, but horizontal operation is permissible if pins 2 and 4 are in vertical plane. It is especially important that this tube, like other power-handling tubes, be adequately ventilated. Filament: volts (ac/dc), 5; amperes, 3.

Full-Wave Rectifier

MAXIMUM RATINGS (Design-Maximum Values)

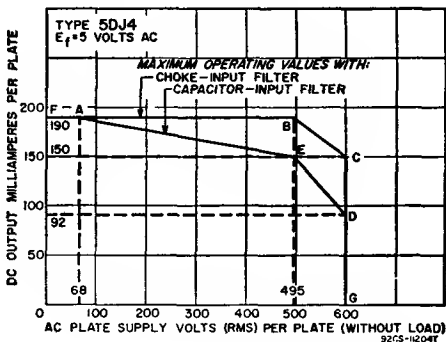
Peak Inverse Plate Voltage	1700	volts
Peak Plate Current (Per Plate)	1	ampere
Hot-Switching Transient Plate Current (Per Plate)	5	amperes
AC Plate-Supply Voltage (Per Plate, rms, without load)	See Rating Chart	
Average Output Current (Per Plate)	See Rating Chart	

TYPICAL OPERATION

Filter Input	Capacitor		Choke	
AC Plate-to-Plate Supply Voltage (rms, without load)	600	900	1100	volts
Filter-Input Capacitor	40	40	—	μ F
Filter-Input Choke	—	—	10	henries
Effective Plate-Supply Impedance per Plate	21	67	—	ohms
DC Output Voltage at Input to Filter (Approx.)	290	460	420	volts
Average Output Current	300	275	275	mA

• When capacitor values greater than 40 μ F are used, the effective plate-supply impedance should be increased so that the maximum rating for peak plate current is not exceeded.

RATING CHART



5EA8

Refer to type 6EA8.

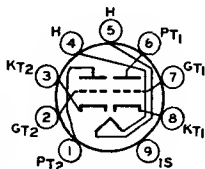
5ES8

5ES8/

YCC189

VARIABLE-MU TWIN TRIODE

Miniature type used as cascode-type amplifier in tuners of television receivers. Outlines section, 6B; requires miniature 9-contact socket. Heater: volts (ac/dc), 5.6; amperes, 0.45.



9AJ

Class A₁ Amplifier (Each Unit)

CHARACTERISTICS

Plate Voltage	90	90	90	volts
Grid Voltage	-1.4	-5	-9	volts
Plate Resistance	2500	—	—	ohms
Transconductance	12500	625	125	μ mhos
Plate Current	15	—	—	mA

Cascode-Type Amplifier (Each Unit)

MAXIMUM RATINGS (Design-Center Values)

Plate Voltage with plate current of 0 mA	550	volts
Plate Voltage	130	volts
Grid Voltage, Negative-bias value	50	volts
Cathode Current	22	mA
Plate Dissipation	1.8	watts
Heater-Cathode Voltage:		
Grounded-cathode section ^A	80	volts
Grounded-grid section (cathode positive) ^B	180*	volts