

Refer to type 6LJ8.

5LJ8

Refer to type 6MB8.

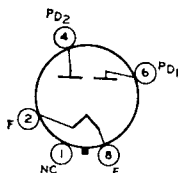
5MB8

For replacement use type 5J6.

5MHH3

Refer to type 6MQ8.

5MQ8



5T

**FULL-WAVE
VACUUM RECTIFIER**

5R4GB
INDUSTRIAL
TYPE

Glass octal type for industrial and military applications. Outlines section, 19D; requires octal socket.

Filament Voltage (ac/dc)	5	volts
Filament Current	2	amperes
Operating Position	Vertical, base down or up, or Horizontal with pins 2 and 4 in vertical plane	

Full-Wave Rectifier

MAXIMUM RATINGS (Absolute-Maximum Values)

For altitudes up to	40000	20000	feet
Peak Inverse Plate Voltage	2650	3100	volts
AC Plate Supply Voltage Per Plate (RMS, without load)	See Rating Chart		
Peak Plate Current Per Plate	715	715	mA
DC Output Current Per Plate	See Rating Chart		
Hot-Switching Transient Plate Current Per Plate	*	*	
Bulb Temperature (At hottest point on bulb surface)	230	230	°C

TYPICAL OPERATION (With Capacitor-Input Filter)

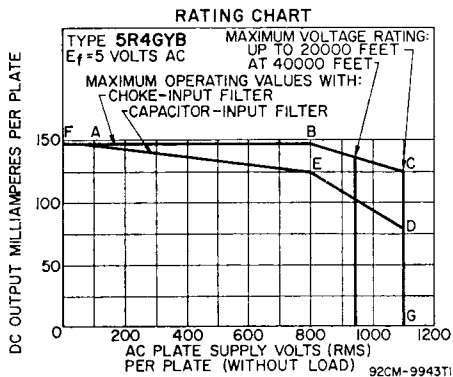
For altitudes up to	40000		20000	feet																				
AC Plate-to-Plate Supply Voltage (RMS, without load)	1400	1500	2000	volts																				
Filter-Input Capacitor	20	20	20	μF																				
Total Effective Plate Supply Impedance Per Plate**	225	250	375	ohms																				
DC Output Voltage at Input to Filter (approx.):																								
At half-load current of	<table border="0"> <tr> <td>75 mA</td> <td>—</td> <td>910</td> <td>1210</td> <td>volts</td> </tr> <tr> <td>125 mA</td> <td>750</td> <td>—</td> <td>—</td> <td>volts</td> </tr> <tr> <td>150 mA</td> <td>—</td> <td>800</td> <td>1040</td> <td>volts</td> </tr> <tr> <td>250 mA</td> <td>605</td> <td>—</td> <td>—</td> <td>volts</td> </tr> </table>				75 mA	—	910	1210	volts	125 mA	750	—	—	volts	150 mA	—	800	1040	volts	250 mA	605	—	—	volts
75 mA	—	910	1210	volts																				
125 mA	750	—	—	volts																				
150 mA	—	800	1040	volts																				
250 mA	605	—	—	volts																				
Voltage Regulation (approx.):																								
Half-load to full-load current	145	110	170	volts																				
DC Output Current	250	150	150	mA																				

TYPICAL OPERATION (With Choke-Input Filter)

For altitudes up to	40000	20000	feet
AC Plate-to-Plate Supply Voltage (RMS, without load)	1500	1900	volts
Filter-Input Choke	5	10	henries
DC Output Voltage at Input to Filter for dc output (approx.):			
87.5 mA	—	800	volts
125 mA	600	—	volts
175 mA	—	760	volts
250 mA	560	—	volts
Voltage Regulation (Approx.):			
Half-load to full-load current	40	40	volts
DC Output Current	250	175	mA

* If hot-switching is required in operation, choke-input circuits are 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 value of 3 amperes should not be exceeded.

** Indicated values for conditions shown will limit peak plate current to the maximum-rated value. When a filter-input capacitor larger than 20 μf is used, it may be necessary to increase plate-supply impedance to a higher value than that shown in the data to limit the peak plate current to the maximum-rated value.



5R4GY
5R4GYB

For replacement use type 5R4GB.

5T4

Refer to chart at end of section.

5T8

Refer to type 6T8A.

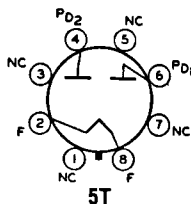
5U4G

Refer to chart at end of section.

5U4GB

**FULL-WAVE
VACUUM RECTIFIER**

Glass octal type used in power supplies of radio and color and black-and-white television receivers having high dc requirements. Outlines section, 19E; requires octal socket. This type may be supplied with pins 3, 5, and 7 omitted. Vertical mounting is preferred, but horizontal mounting is permissible if pins 2 and 4 are in vertical plane. The coated filament is designed to operate from the ac line through a step-down transformer. The voltage at the filament terminals should be 5 volts at an average line voltage of 117 volts. It is especially important that this tube, like other power-handling tubes, be adequately ventilated. For discussion of Rating Chart and Operation Characteristics, refer to Interpretation of Tube Data. Filament: volts (ac), 5; amperes, 3.



Full-Wave Rectifier

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage	1550	volts
Peak Plate Current (Per Plate)	1	ampere
Hot-Switching Transient Plate Current (Per Plate)	#	
AC Plate Supply Voltage (Per Plate, rms)		See Rating Chart
Average Output Current (Per Plate)		See Rating Chart

TYPICAL OPERATION WITH CAPACITOR INPUT TO FILTER

AC Plate-to-Plate Supply Voltage (rms)	600	900	1100	volts
Filter-Input Capacitor*	40	40	40	μ F
Total Effective Plate-Supply Impedance per Plate	21	67	97	ohms
DC Output Voltage at Input to Filter (Approx.):				
At full-load current of				volts
150 mA	335	—	—	volts
137.5 mA	—	520	—	volts
81 mA	—	—	680	volts
300 mA	290	—	—	volts
At half-load current of				volts
275 mA	—	460	—	volts
162 mA	—	—	630	volts
Voltage Regulation (Approx.):				
Half-load to full-load current	45	60	50	volts

