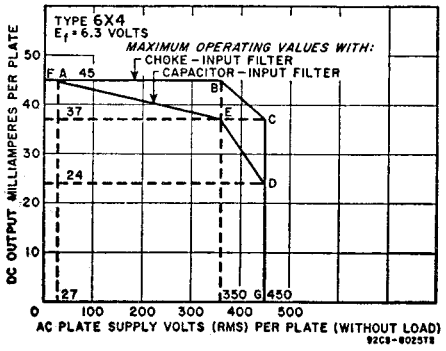
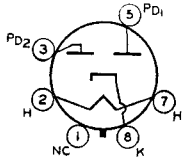
RATING CHART



Refer to chart at end of section. **6X4W**

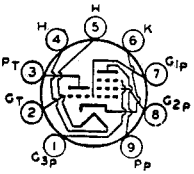
Refer to chart at end of section. **6X5**



FULL-WAVE VACUUM RECTIFIER — 6X5GT

Glass octal type used in power supply of automobile and ac-operated receivers. **Outlines section,** 13D; requires octal socket. This type may be supplied with pin No.1 omitted. For maximum ratings, and typical operation, refer to type 6X4.

Refer to chart at end of section. **6X8**



MEDIUM-MU TRIODE—SHARP-CUTOFF PENTODE — 6X8A

5X8, 19X8

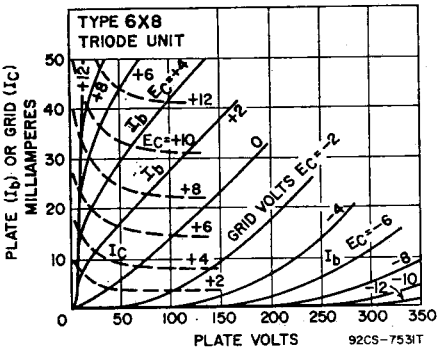
Miniature type used as combined oscillator and mixer tube in television receivers utilizing an intermediate frequency in the order of 40 MHz and in AM/FM receivers. **Outlines section,** 6B; requires miniature 9-contact socket. Types 5X8 and 19X8 are identical with type 6X8A except for heater ratings.

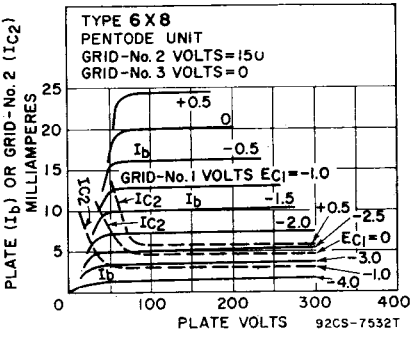
	5X8	6X8A	19X8	
Heater Voltage (ac/dc)	4.7	6.3	18.4	volts
Heater Current	0.6	0.45	0.15	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:	Unshielded	Shielded▲		
Triode Unit:				
Grid to Plate	1.5	1.5		pF
Grid to Cathode and Heater	2	2.4		pF
Plate to Cathode and Heater	0.5	1		pF
Pentode Unit:				
Grid No.1 to Plate	0.09 max	0.06 max		pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	4.6	4.8		pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	0.9	1.6		pF
Pentode Grid No.1 to Triode Plate	0.05 max	0.04 max		pF
Pentode Plate to Triode Plate	0.05 max	0.008 max		pF
Heater to Cathode	6.5	6.5•		pF

▲ With external shield connected to cathode except as noted.
• Wilth external shield connected to pentode plate.

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)	Triode Unit	Pentode Unit	
Plate Voltage	275	275	volts
Grid No.2 (Screen-Grid) Supply Voltage	—	275	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	1.7	2.3	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 137.5 volts	—	0.45	watt
For grid-No.2 voltages between 137.5 and 275 volts	—	See curve page 300	
CHARACTERISTICS			
Plate Voltage	125	125	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—1	—1	volt
Amplification Factor	40	—	
Plate Resistance (Approx.)	6000	300000	ohms
Transconductance	6500	5500	μmhos
Plate Current	12	9	mA
Grid-No.2 Current	—	2.2	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—7	—6.5	volts

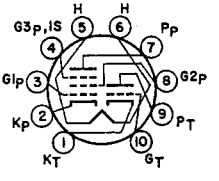




6X9/ ECF200

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Miniature type used as if-amplifier tube in television receivers. **Outlines section** 6B, except has 10-pin base; requires miniature 10-contact socket.



10K

Heater Voltage	6.3	volts
Heater Current	0.41	ampere
Peak Heater-Cathode Voltage	±150 max	volts
Direct Interelectrode Capacitances:		
Triode Unit:		
Plate to All Other Elements (except grid)	3	pF
Grid to All Other Elements (except plate)	2.5	pF
Plate to Grid	2	pF
Pentode Unit:		
Plate to All Other Elements (except grid No.1)	3.5	pF
Grid No.1 to All Other Elements (except plate)	6.5	pF
Grid No.1 to Cathode	4	pF
Plate to Grid No.1	<6.5	pF
Grid No.1 to Grid No.2	1.8	pF