

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.3	ampere
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Grid No.1 to Plate	0.02 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	6.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	2	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

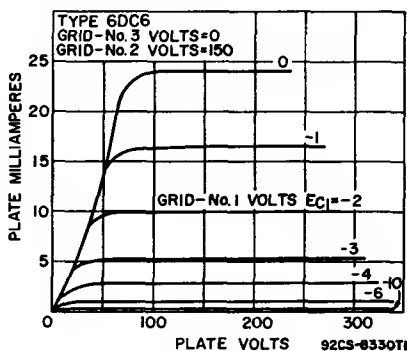
Plate Voltage	300	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 Supply Voltage	300	volts
Grid-No.2 (Screen-Grid) Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	2	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	0.5	watt
For grid-No.2 voltages between 150 and 300 volts	See curve page 98	

CHARACTERISTICS

Plate Supply Voltage	200	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	150	volts
Cathode-Bias Resistor	180	ohms
Plate Resistance (Approx.)	0.5	megohm
Transconductance	5500	μmhos
Plate Current	9	mA
Grid-No.2 Current	3	mA
Grid-No.1 Voltage (Approx.) for transconductance of 50 μmhos	-12.5	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.25	megohm
For cathode-bias operation	1	megohm



6DC8

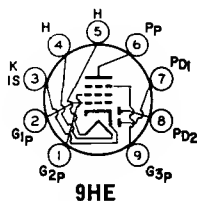
Refer to chart at end of section.

6DC8/ EBF89

TWIN DIODE—SEMIREMOTE- CUTOFF PENTODE

Miniature type used as rf- and if-amplifier tube in radio and television receivers. Outlines section, 6E; requires 9-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.3	ampere
Peak Heater-Cathode Voltage	±100 max	volts



Direct Interelectrode Capacitances:

Pentode Unit:

Grid No.1 to Plate	0.0025 max	pF
Grid No.1 to All Other Electrodes Except Plate	5	pF
Plate to All Other Electrodes Except Grid No.1	5.2	pF
Grid No.1 to Heater	0.05 max	pF
Plate of Each Diode Unit to All Other Electrodes	2.5	pF
Plate of Diode Unit No.1 to Plate of Diode Unit No.2	0.25 max	pF
Plate of Diode Unit No.1 to Heater	0.015 max	pF
Plate of Diode Unit No.2 to Heater	0.003 max	pF
Plate of Diode Unit No.1 to Pentode Grid No.1	0.0008 max	pF
Plate of Diode Unit No.2 to Pentode Grid No.1	0.001 max	pF
Plate of Diode Unit No.1 to Pentode Plate	0.15 max	pF
Plate of Diode Unit No.2 to Pentode Plate	0.025 max	pF

Pentode Unit as Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

Plate Supply Voltage	550	volts
Plate Voltage	300	volts
Grid-No.2 Voltage:		
With plate current greater than 8 mA	125	volts
With plate current less than 4 mA	300	volts
Cathode Current	16.5	mA
Plate Dissipation	2.25	watts
Grid-No.2 Input	0.45	watts

CHARACTERISTICS

Plate Voltage	200	250	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Voltage	100	100	volts
Grid-No.1 Voltage	-1.5	-2	volts
Mu Factor, Grid No.2 to Grid No.1	20	20	
Plate Resistance (Approx.)	0.6	1	megohm
Transconductance	4500	3800	μmhos
Plate Current	11	9	mA
Grid-No.2 Current	3.3	2.7	mA
Transconductance, at grid-No.1 voltage of -20 volts	120	200	μmhos

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	3	megohms
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Diode Units (Each Unit)

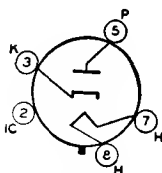
MAXIMUM RATINGS (Design-Center Values)

Peak Inverse Plate Voltage	200	volts
Peak Plate Current	5	mA
Average Plate Current	0.8	mA

HALF-WAVE
VACUUM RECTIFIER

6DE4

17DE4, 22DE4



4CG

Glass octal type used as damper tube in horizontal-deflection circuits of television receivers. Outlines section, 13G; requires octal socket. Socket terminals 1, 2, 4, and 6 should not be used as tie points. This tube, like other power-handling tubes, should be adequately ventilated. Types 17DE4 and 22DE4 are identical with type 6DE4 except for heater ratings.

	6DE4	17DE4	22DE4	
Heater Voltage (ac/dc)	6.3	17	22.4	volts
Heater Current	1.6	0.6	0.45	amperes
Heater Warm-up Time (Average)	—	11	11	seconds
Direct Interelectrode Capacitances (Approx.):				
Plate to Cathode and Heater			8.5	pF
Cathode to Plate and Heater			11.5	pF
Heater to Cathode			4	pF

Damper Service

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

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	5500	volts
Peak Plate Current	1100	mA
Average Plate Current	180	mA
Plate Dissipation	6.5	watts