

Half-Wave Vacuum Rectifier

For TV Damper Service in Equipment
Having Series Heater-String Arrangement

The 22DE4 is the same as the 6DE4 except for the following items:

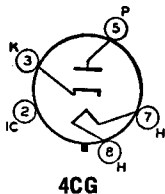
Heater, for Unipotential Cathode:		
Voltage (AC or DC)	22.4	volts
Current	0.45 ± 6%	amp
Warm-up time (Average)	11	sec



HALF-WAVE VACUUM RECTIFIER

6DE4/6CQ4

17DE4, 22DE4



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 6DE4/6CQ4 except for heater ratings.

	6DE4/6CQ4	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
Heater-Cathode Voltage:			
Peak value	+300	-5500	volts
Average value	+100	-900	volts

CHARACTERISTIC Instantaneous Value

Tube Voltage Drop for plate current of 350 mA		34	volts
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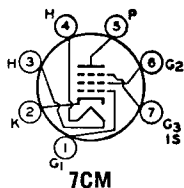
Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

6DE6

4DE6

SHARP-CUTOFF PENTODE

Miniature type used in the gain-controlled picture fix stages of television receivers utilizing an intermediate frequency in the order of 40 MHz and as an rf amplifier in vhf television tuners. Outlines section, 5C; requires miniature 7-contact socket. Type 4DE6 is identical with type 6DE6 except for heater ratings.



	4DE6	6DE6	
Heater Voltage (ac/dc)	4.2	6.3	volts
Heater Current	0.45	0.3	amperes
Heater Warm-up Time (Average)	11	—	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate	Unshielded	Shielded [▲]	
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	0.025 max	0.015 max	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	6.5	6.5	pF
	2	3	pF

▲ With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 300	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	2.3	watts