

Class A₁ or Class AB₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	275	volts
Plate Supply Voltage	600	volts
Grid-No.2 Voltage	220	volts
Grid-No.2 (Screen-Grid) Supply Voltage	600	volts
Cathode Current	110	mA
Plate Dissipation	14	watts
Grid-No.2 Input	2.1	watts
Peak Grid-No.2 Input	7	watts

CHARACTERISTICS

Plate Voltage	170	volts
Grid-No.2 Voltage	170	volts
Grid-No.1 (Control-Grid) Voltage	-12.5	volts
Mu Factor (Grid No.2 to Grid No.1)	8	
Plate Resistance	26000	ohms
Transconductance	11000	umhos
Plate Current	70	mA
Grid-No.2 Current	3.5	mA

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	1	megohm
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Vertical-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	275	volts
Peak Positive-Pulse Plate Voltage#	2200	volts
Grid-No.2 Voltage	275	volts
Peak Negative-Pulse Grid-No.1 Voltage	250	volts
Peak Cathode Current	240	mA
Average Cathode Current	110	mA
Plate Dissipation	12	watts
Grid-No.2 Input	2.1	watts

MAXIMUM CIRCUIT VALUE

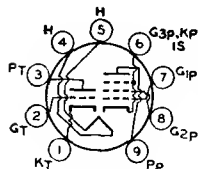
Grid-No.1-Circuit Resistance	2.2	megohms
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Pulse duration must not exceed 6% of a vertical scanning cycle (1.2 milliseconds).

**MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE**

6CX8

8CX8



9DX

Miniature type used in television receiver applications. Pentode unit is used as video amplifier; triode unit is used in sound if-amplifier, sweep-oscillator, sync-separator, sync-amplifier, and sync-clipper circuits. Outlines section, 6E; requires miniature 9-contact socket. Type 8CX8 is identical with type 6CX8 except for heater ratings.

Heater Voltage (ac/dc)	6CX8 6.3	8CX8 8	volts
Heater Current	0.75	0.6	ampere
Heater Warm-up Time (Average)	—	11	volts
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Triode Unit:			
Grid to Plate		4.4	pF
Grid to Cathode and Heater		2.2	pF
Plate to Cathode and Heater		0.38	pF
Pentode Unit:			
Grid No.1 to Plate		0.06	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		9	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		4.4	pF
Triode Grid to Pentode Plate		0.018 max	pF
Pentode Grid No.1 to Triode Plate		0.005 max	pF
Pentode Plate to Triode Plate		0.17 max	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Voltage	—	330	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2	5	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	1.1	watts
For grid-No. voltages between 165 and 330 volts	—	See curve page 300	

CHARACTERISTICS

Plate Supply Voltage	150	200	volts
Grid-No.2 Supply Voltage	—	125	volts
Cathode-Bias Resistor	150	68	ohms
Amplification Factor	40	—	
Plate Resistance (Approx.)	8700	70000	ohms
Transconductance	4600	10000	μmhos
Plate Current	9.2	24	mA
Grid-No.2 Current	—	5.2	mA
Grid-No.1 (Voltage Approx.) for plate current of 100 μA	—5	—8.5	volts

MAXIMUM CIRCUIT VALUES

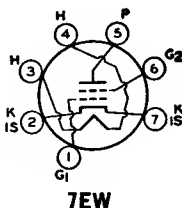
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5	0.25	megohm
For cathode-bias operation	1	1	megohm

6CY5

2CY5, 3CY5

SHARP-CUTOFF TETRODE

Miniature type used as rf amplifier in vhf tuners of television receivers. Outlines section, 5C; requires miniature 7-contact socket. Types 2CY5 and 3CY5 are identical with type 6CY5 except for heater ratings.



	2CY5	3CY5	6CY5	
Heater Voltage (ac/dc)	2.4	2.9	6.3	volts
Heater Current	0.6	0.45	0.2	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	±100 max	volts
Direct Interelectrode Capacitances (Approx.):*				
Grid-No.1 to Plate			0.03	pF
Grid-No.1 to Cathode, Heater, Grid No.2 and Internal Shield ..			4.5	pF
Plate to Cathode, Heater, Grid No.2, and Internal Shield			3	pF

* With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	180	volts
Grid-No.2 (Screen-Grid) Supply Voltage	180	volts
Grid-No.2 Voltage	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Cathode Current	20	mA
Plate Dissipation	2	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 90 volts	0.5	watt
For grid-No.2 voltages between 90 and 180 volts	See curve page 300	

CHARACTERISTICS

Plate Voltage	125	volts
Grid-No.2 Voltage	80	volts
Grid-No.1 Voltage	—1	volt
Plate Resistance (Approx.)	0.1	megohm
Transconductance	8000	μmhos
Plate Current	10	mA
Grid-No.2 Current	1.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—6	volts

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	0.5	megohm
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