

Pentode Unit:

Grid No.1 to Plate	0.010 max	0.006 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	5	5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	2.6	3.5	pF
Triode Cathode to Heater	3	3*	pF
Pentode Cathode, Pentode Grid No.3, and Internal Shield	3	3*	pF
Pentode Grid No.1 to Triode Plate	0.2 max	0.2 max	pF
Pentode Plate to Triode Plate	0.1 max	0.02 max	pF

* With external shield connected to pin 4 except as noted.

• With external shield connected to pin 6.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

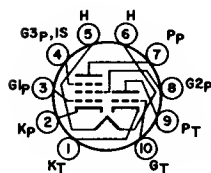
	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	—	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	3	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	0.55	watt
For grid-No.2 voltages between 165 and 330 volts	—	See curve page 98	

CHARACTERISTICS

Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	110	volts
Grid-No.1 Voltage	—1	—1	volts
Amplification Factor	40	—	
Plate Resistance (Approx.)	—	0.2	megohm
Transconductance	7500	5000	μmhos
Plate Current	13.5	9.5	mA
Grid-No.2 Current	—	3.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—9	—8	volts

MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE

**6U9/
ECF201**
5U9/LCF201



10K

Miniature type used in if-amplifier and sound and sync applications in television receivers. Outlines section, 6B, except has 10-pin base; requires miniature 10-contact socket. Type 5U9/LCF201 is identical with type 6U9/ECF201 except for heater ratings.

	5U9/LCF201	6U9/ECF201	
Heater Voltage	5.9	6.3	volts
Heater Current	0.45	0.41	ampere
Peak Heater-Cathode Voltage	±100 max	±150 max	volts
Direct Interelectrode Capacitance:			
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	fF
Grid No.1 to Grid No.2		1.8	pF
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 Plate to Triode Plate		<15	fF
Pentode Grid No.1 to Triode Plate		<1.2	fF
Pentode Grid No.1 to Triode Grid		<1.5	fF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Supply Voltage	550	550	volts
Plate Voltage	250	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	250	volts
Peak Cathode Current*	50	—	mA

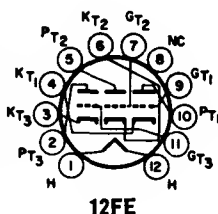
	Triode Unit	Pentode Unit	
Cathode Current	18	18	mA
Plate Dissipation	1.5	2.1	watts
Grid-No.2 Input	—	0.7	watt
CHARACTERISTICS			
Plate Voltage	100	160	volts
Grid-No.3 (Suppressor-Grid) Voltage	—	0	volts
Grid-No.2 Voltage	—	110	volts
Grid-No.1 (Control-Grid) Voltage	-2	-1.4	volts
Mu Factor, Grid No.1 to Grid No.2	—	45	
Amplification Factor	17	—	
Transconductance	5000	12000	μ mhos
Plate Current	14	13	mA
Grid-No.2 Current	—	5	mA
MAXIMUM CIRCUIT VALUES			
Grid-No.1-Circuit Resistance	1	1	megohm

* With a maximum duty cycle of 0.10 and maximum pulse duration of 10 microseconds.

6U10

THREE-UNIT TRIODE

Duodecar type used in amplifier applications. Units No.1 and No.3 are medium-mu triode units, and unit No.2 is a high-mu triode unit. Outlines section, 8A; requires duodecar 12-contact socket. Heater: volts (ac/dc), 6.3; amperes, 0.6; warm-up time (average), 11 seconds; maximum heater-cathode volts, ± 275 (peak) for units 1 and 3; ± 200 (peak) for unit 2; 100 (average) for each unit.



Class A₁ Amplifier

	Units Nos. 1 and 3	Unit No.2	
MAXIMUM RATINGS (Design-Maximum Values)			
Plate Voltage	330	330	volts
DC Grid Voltage:			
Positive-bias value	0	0	volts
Negative-bias value	50	50	volts
Average Cathode Current	20	—	mA
Plate Dissipation	2	1	watts
CHARACTERISTICS			
Plate Voltage	200	200	volts
Grid Voltage	-6	-1.5	volts
Amplification Factor	17.5	90	
Plate Resistance (Approx.)	7700	61000	ohms
Transconductance	2300	1600	μ mhos
Plate Current	9.6	1.2	mA
Grid Voltage (Approx.):			
For plate current of 100 μ A	-15	—	volts
For plate current of 35 μ A	—	-3	volts
MAXIMUM CIRCUIT VALUES			
Grid-Circuit Resistance:			
For fixed-bias operation	1	0.5	megohm
For cathode-bias operation	2.2	1*	megohms

* This value may reach 10 megohms provided the plate-supply voltage and load resistance are such that the plate dissipation can never exceed 0.5 watt.

6V3A

HALF-WAVE VACUUM RECTIFIER

Miniature type used as a damper tube in horizontal-deflection circuits of television receivers. Outlines section, 7B; requires miniature 9-contact socket. This tube, like other power-handling tubes, should be adequately ventilated. Heater: volts (ac/dc), 6.3; amperes, 1.75.

