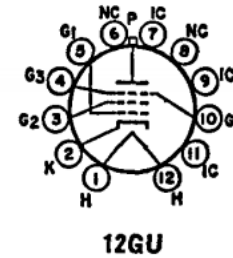


6KN6

42KN6

BEAM PENTODE

Duodecar type used as horizontal-deflection amplifier in color and black-and-white television receivers. Outlines section, 39B; requires duodecar 12-contact socket. Type 42KN6 is identical with type 6KN6 except for heater ratings.



12GU

	6KN6	42KN6	
Heater Arrangement	Parallel	Series	
Heater Voltage	6.3	42	volts
Heater Current	3	0.45	ampere
Heater Warm-up Time	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts

Class A₁ Amplifier

CHARACTERISTICS	Triode* Connection		Pentode Connection		
	Plate Voltage	130	5500	60	
Grid-No.2 (Screen-Grid) Voltage	130	125	125	130	volts
Grid-No.1 (Control-Grid) Voltage	-20	—	0	-20	volts
Plate Resistance	—	—	—	4000	ohms
Transconductance	—	—	—	16000	μmhos
Plate Current	—	—	800 ^A	100	mA
Grid-No.2 Current	—	—	50 ^A	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—	—	-33	volts
Grid-No.1 Voltage (Approx.) for plate current of 75 μA	—	100	—	—	volts
Amplification Factor	4.5	—	—	—	

^A This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

* Grid No.2 connected to plate.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage [#]	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Average Cathode Current	400	mA
Peak Cathode Current	1500	mA
Plate Dissipation*	30	watts
Grid-No.2 Input	5	watts
Bulb Temperature (At hottest point)	260	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	1	megohm
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[#] Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).

* A bias resistor or other means is required to protect the tube in absence of excitation.